

DR WPI: 1997-034299/03.
 XX N-PSDB: AAM59777.
 CC Nucleic acid encoding mammary-specific secretory protein.
 PT mammaplobin - used to develop prods. for the early diagnosis and
 PT treatment of breast cancer neoplastic disease
 XX
 PS Claim 3: Fig 2: 54pp: English.
 XX
 CC The present sequence is that of a mammary-specific secretory protein
 CC designated mammaplobin, which is overexpressed in 27% of stage I primary
 CC breast cancer tumours. The anonymous sequence lag previously designated
 CC D57002 was used to demonstrate that mammaplobin is abundant in the
 CC breast cancer tumour cell line MDA-MB-415. To isolate the full-length
 CC cDNA sequence (AAM59777), the anonymous sequence was used to screen
 CC this cell line and cloned using the RACE PCR technique. The nucleic acid
 CC and protein can be used to develop prods. e.g. antibodies or probes, for
 CC the detection and treatment of breast neoplastic disease.
 XX
 SO Sequence 93 AA:
 Query Match 100.0% Score 475; DB 18; Length 93;
 at: Local Similarity 100.0% Pred. No. 2,96-47;
 ches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 KKLMLVLMALALSOHCYACSCCPLEENVISKTIINQVSTKTEKELDERIDMATTNAID 60
 DB 1 KKLMLVLMALALSOHCYACSCCPLEENVISKTIINQVSTKTEKELDERIDMATTNAID 60
 OY 61 ELKRCFLMOTDETLSNVEVFNQILYSSSLDOLF 93
 DB 61 ELKRCFLMOTDETLSNVEVFNQILYSSSLDOLF 93
 XX
 RESULT 2
 ID AAM59777 standard: Protein: 93 AA.
 XX
 XX AAM59777:
 XX
 DE 12-OCT-1998 (first entry)
 DE
 XX Amino acid sequence of the human steroid binding protein C2.
 DE
 XX human steroid-binding protein C2; hSBP2; hSBP1; breast cancer: probe;
 KW gene therapy vector; ribozyme; probe; hybridisation; amplification;
 KW antibody; immunoassay.
 XX
 OS Homo sapiens.
 XX
 XX W0982131-AL.
 XX
 PL 22-MAY-1998.
 XX
 PF 07-NOV-1997: 97MO-US20674.
 XX
 PR 12-NOV-1996: 96US-0747547.
 XX
 PA (INCYTE) INCYTE PHARM INC.
 XX
 PI Akertblom LE, Goli SK, Hawkins PR, Hillman JL, Murry LE;
 XX WPI: 1998-297915/26.
 DR N-PSDB: AAM41580.
 XX
 PT New human steroid binding proteins C1 and C2 - useful for, e.g.
 PT diagnosis, monitoring and treating breast cancer, and for drug
 PT screening
 XX
 PS Claim 12: Fig 2: 70pp: English.
 XX
 CC This is the amino acid sequence of the human steroid-binding protein
 CC C2 (hSBP2) used in the method of the invention for the diagnosis.

CC monitoring and treatment of breast cancer. hSBP1 and hSBP2 are useful
 CC as markers for breast cancer. A method of detecting hSBP1 and hSBP2
 CC and using the results to identify subjects at risk and to identify subjects
 CC at risk and to discriminate between different forms of cancer for
 CC selection of appropriate therapies. They may also be used for drug
 CC screening. Nucleic acids encoding hSBP1 and hSBP2 can be used in gene
 CC therapy vectors to over express the steroid-binding proteins, preventing
 CC binding of steroids, or antisense sequences, ribozymes. Their nucleic
 CC acids can also be used for the diagnosis and monitoring (by quantifying
 CC expression of hSBP1), as source of probes for hybridisation and
 CC amplification of genomic or related sequences for studying regulation of
 CC gene function and for mapping the genomic sequence. Antibodies are used
 CC as diagnostic reagents in standard immunoassays for hSBP.
 XX
 SO Sequence 93 AA:
 Query Match 100.0% Score 475; DB 19; Length 93;
 Best Local Similarity 100.0% Pred. No. 2,96-47;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 KKLMLVLMALALSOHCYACSCCPLEENVISKTIINQVSTKTEKELDERIDMATTNAID 60
 DB 1 KKLMLVLMALALSOHCYACSCCPLEENVISKTIINQVSTKTEKELDERIDMATTNAID 60
 OY 61 ELKRCFLMOTDETLSNVEVFNQILYSSSLDOLF 93
 DB 61 ELKRCFLMOTDETLSNVEVFNQILYSSSLDOLF 93
 XX
 RESULT 3
 ID AAM48432 standard: Protein: 93 AA.
 XX
 XX AAM48432:
 XX
 DE 13-JUL-1998 (first entry)
 DE
 XX Mammaplobin protein.
 XX
 KW Mammaplobin: detection; diagnosis; breast cancer; tumour; antibody;
 KW gene therapy; human.
 XX
 OS Homo sapiens.
 XX
 XX W09807753-AL.
 XX
 PD 26-FEB-1998.
 XX
 PF 19-AUG-1997: 97MO-US14666.
 XX
 PR 13-AUG-1997: 97US-0697106.
 XX
 PA 19-AUG-1996: 96US-0697106.
 XX
 PA (ABNO) ABBOTT LAB.
 XX
 PI Billing-McGill PA, Cohen M, Colpitts TL, Friedland PN;
 PI Gordon J, Gramados EN, Hodges SC, Klass MR, Kralovich II JD;
 PI Roberts-Rapp L, Russell JC, Stroupe SD;
 XX WPI: 1998-163066/15.
 DR N-PSDB: AAM17905, AAM17906.
 XX
 PT Antibodies to mammaplobin polypeptide(s) - used for detecting,
 PT diagnosing, preventing or treating diseases or conditions of breast
 PT such as breast cancer
 XX
 PS Claim 8: Page 92: 105pp: English.
 XX
 CC The present sequence represents mammaplobin which is used in an example
 CC of the present invention. The present invention describes an antibody
 CC (A) which specifically binds to at least 1 mammaplobin epitope (PE) which
 CC is derived from an amino acid sequence having at least 50% identity to
 CC an amino acid sequence (see AAM48432) and fragments. Also described are:

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OM protein - protein search, using sw model

Run on: April 24, 2003, 16:13:12 : Search time 31.5082 Seconds
(without alignments)
393.304 Million cell updates/sec

Title: US-09-975-502a-5
Perfect score: 475
Sequence: 1 MLLMLVLMALALSOHCYAGS.....LSNWEVFMQLLYDSLCOLF 93

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 08
Maximum Match 100%

Listing first 45 summaries

Database :
1: A_Genesec.101002:*
2: /SID52/gcgdata/genesecq/genesecp-emb1/AA1980.DAT:*
3: /SID52/gcgdata/genesecq/genesecp-emb1/AA1981.DAT:*
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24: /SID52/gcgdata/genesecq/genesecp-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	475	100.0	93	18	AAW10179
2	475	100.0	93	19	AAW59777
3	475	100.0	93	19	AAW48432
4	475	100.0	93	20	AAW01718
5	475	100.0	93	21	AAW13786
6	475	100.0	93	21	AAW48432
7	475	100.0	93	22	AAW07517
8	475	100.0	93	22	AAW51127
9	475	100.0	410	22	AAW33359
10	475	100.0	743	22	AAW33358

11	475	100.0	1095	22	AAW33357	Human breast cancer
12	474	99.8	93	22	AAE07531	Human mammary lobin
13	471	99.2	93	22	AAE07534	Human mammary lobin
14	471	99.2	93	22	AAE07535	Human mammary lobin
15	471	99.2	93	22	AAE07536	Human mammary lobin
16	468	98.5	93	22	AAE07529	Human mammary lobin
17	466	98.1	93	22	AAE07532	Human mammary lobin
18	463	97.5	93	22	AAE07530	Human mammary lobin
19	463	97.5	93	22	AAE07533	Human mammary lobin
20	448.5	94.4	90	22	AAE07528	Human mammary lobin
21	448.5	94.4	90	22	AAE07537	Human mammary lobin
22	380	80.0	74	21	AAW484624	Amino acid sequence
23	380	80.0	220	21	AAO22141	Ra12-mammarylobin f
24	281	59.2	95	18	AAW35804	Human endometrial
25	281	59.2	95	20	AAW02590	A human mammarylobi
26	281	59.2	95	21	AAW03769	Human endometrial
27	281	59.2	95	21	AAW92226	Human endometrial
28	281	59.2	95	21	AAW92237	Mammarylobin homolo
29	281	59.2	95	21	AAW65394	Human 5' EST relat
30	281	59.2	95	22	AAW31682	An endometrial spe
31	281	59.2	95	23	AAO20555	Protein of human L
32	281	59.2	95	23	AAW09635	Human endometrial
33	281	59.2	108	20	AAW60038	Human endometrium
34	272	57.3	93	23	AAW83620	Human PRO protein,
35	208	43.8	74	19	AAW61649	Non-ocular disease
36	170	35.8	33	19	AAW48433	Mammarylobin synthe
37	157	33.1	30	19	AAW48435	Mammarylobin synthe
38	137	28.8	27	19	AAW48434	Mammarylobin synthe
39	117	24.6	23	22	AAW51136	Human mammarylobin
40	114	24.0	21	22	AAW51124	Human mammarylobin
41	114	24.0	21	22	AAW51126	Mammarylobin monocl
42	114	24.0	21	22	AAW48441	Mammarylobin synthe
43	113	23.8	22	19	AAW51130	Human mammarylobin
44	108	22.7	20	22	AAW51134	Human mammarylobin
45	106	22.3	20	22	AAW51134	Human mammarylobin

ALIGNMENTS

RESULT 1	AAW10179	standard: Protein: 93 AA.
ID	AAW10179	
AC	AAW10179	
XX		
XX		
DT	12-AUG-1997	(first entry)
XX		
DE	Mammary-specific secretory protein, mammarylobin.	
XX		
KW	mammarylobin: mammary-secretory protein: breast cancer: detection;	
KW	neoplastic disease: diagnosis.	
XX		
OS	Homo sapiens.	
XX		
FH	Key	Location/Qualifiers
FT	Peptide	1..19
FT	Protein	/label= signal_peptide
FT		20..93
FT		/label= mature_protein
XX		
PN	W09638463-A1.	
XX		
PD	05-DEC-1996.	
XX		
PF	31-MAY-1996:	96MO-US08235.
XX		
PR	31-MAY-1995:	95US-0455896.
XX		
PA	(UNIW) UNIV WASHINGTON.	
XX		
PI	Fleming TP, Watson MA:	
XX		

DR WPI: 1997-034299/03.
XX N-PSDB: AAT50925.
PT Nucleic acid encoding mammary-specific secretory protein,
PR mamaglobin - used to develop prods. for the early diagnosis and
PT treatment of breast cancer neoplastic disease
PS Claim 3; Fig 2; 54pp; English.
XX
CC The present sequence is that of a mammary-specific secretory protein
CC designated mamaglobin, which is overexpressed in 27% of stage I primary
CC breast cancer tumours. The anonymous sequence tag previously designated
CC DEST002 was used to demonstrate that mamaglobin is abundant in the
CC breast cancer tumour cell line MDA-MB-415. To isolate the full-length
CC mamaglobin cDNA (AAT50925), the mRNA was reverse transcribed from
CC this cell line and cloned using the RACE PCR technique. The nucleic acid
CC and protein can be used to develop prods. e.g. antibodies or probes, for
CC the detection and treatment of breast neoplastic disease.
XX
SO Sequence 93 AA:
Query Match 100.0%; Score 475; DB 18; Length 93;
St Local Similarity 100.0%; Pred. No. 2,9e-47;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 MKLWVLMALALSOHCYAGSCGCPLEENISKTNPOVSKTEYKELDEFIDNNATTNAID 60
DB 1 MKLWVLMALALSOHCYAGSCGCPLEENISKTNPOVSKTEYKELDEFIDNNATTNAID 60
OY 61 ELKECFNLQDTETLSNVEVFMQLIYDSSLCDLF 93
DB 61 ELKECFNLQDTETLSNVEVFMQLIYDSSLCDLF 93
RESULT 2
ID AAM59777 standard; Protein: 93 AA.
AC AAM59777;
XX 12-OCT-1998 (first entry)
XX
DE Amino acid sequence of the human steroid binding protein C2:
XX
KW Human steroid-binding protein C2: hSBP2; hSBP1; breast cancer; probe;
KW gene therapy vector; ribozyme; probe; hybridisation; amplification;
XX antibody; immunoassay.
XX
OS Homo sapiens.
XX
PN MO9821331-A1.
XX
PL 22-MAY-1998.
XX
PE 07-NOV-1997; 97WO-US20674.
XX
PR 12-NOV-1996; 96US-0747547.
XX
PA (INCYT) INCYTE PHARM INC.
XX
PI Aketblom IE, Goli SK, Hawkins PR, Hillman JL, Murry LE;
XX
DR WPI: 1998-297935/26.
XX
DR N-PSDB: AAV41580.
XX
PT New human steroid binding proteins C1 and C2 - useful for, e.g.
PT diagnosis, monitoring and treating breast cancer, and for drug
PT screening
PS Claim 12; Fig 2; 70pp; English.
XX
CC This is the amino acid sequence of the human steroid-binding protein
CC C2 (hSBP2) used in the method of the invention for the diagnosis,

CC monitoring and treatment of breast cancer. hSBP1 and hSBP2 are useful
CC as markers for breast cancer, i.e. measuring levels of hSBP1 and hSBP2
CC used for diagnosis or monitoring the disease, to identify subjects
CC at risk and to discriminate between different forms of cancer for
CC selection of appropriate therapies. They may also be used for drug
CC screening. Nucleic acids encoding hSBP1 and hSBP2 can be used in gene
CC therapy vectors to over express the steroid-binding proteins, preventing
CC binding of steroids, or antisense sequences, ribozymes. Their nucleic
CC acids can also be used for the diagnosis and monitoring (by quantifying
CC expression of hSBP), as source of probes for hybridisation and
CC amplification of genomic or related sequences for studying regulation of
CC gene function and for mapping the genomic sequence. Antibodies are used
CC as diagnostic reagents in standard immunoassays for hSBP.
XX
SO Sequence 93 AA:
Query Match 100.0%; Score 475; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 2,9e-47;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 MKLWVLMALALSOHCYAGSCGCPLEENISKTNPOVSKTEYKELDEFIDNNATTNAID 60
DB 1 MKLWVLMALALSOHCYAGSCGCPLEENISKTNPOVSKTEYKELDEFIDNNATTNAID 60
OY 61 ELKECFNLQDTETLSNVEVFMQLIYDSSLCDLF 93
DB 61 ELKECFNLQDTETLSNVEVFMQLIYDSSLCDLF 93
RESULT 3
ID AAM48432 standard; Protein: 93 AA.
AC AAM48432;
XX 13-JUL-1998 (first entry)
XX
DE Mamaglobin protein.
XX
KW Mamaglobin; detection; diagnosis; breast cancer; tumour; antibody;
KW gene therapy; human.
XX
OS Homo sapiens.
XX
PN MO9807753-A1.
XX
PD 26-FEB-1998.
XX
PE 19-AUG-1997; 97WO-US14666.
XX
PR 15-AUG-1997; 97US-0697106.
XX
PR 19-AUG-1996; 96US-0697106.
XX
PA (ABBO) ABBOTT LAB.
XX
PI Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN;
PI Gordon J, Granados EN, Hodges SC, Klass MR, Kratochvil JD;
PI Roberts-Kapp L, Russell JC, Stroupe SD;
XX
DR WPI: 1998-169096/15.
XX
DR N-PSDB: AAV17905, AAV17906.
XX
PT Antibodies to mamaglobin polypeptide(s) - used for detecting,
PT diagnosing, preventing or treating diseases or conditions of breast
PT such as breast cancer
PS Claim 8; Page 92; 105pp; English.
XX
CC The present sequence represents mamaglobin which is used in an example
CC of the present invention. The present invention describes an antibody
CC (A) which specifically binds to at least 1 mamaglobin epitope (Mc) which
CC is derived from an amino acid sequence having at least 50% identity to
CC an amino acid sequence (see AAM48432) and fragments. Also described are:

CC (1) an assay kit for determining the presence of mammaglobin antigen (MA)
 CC in a test sample, comprising a container containing an antibody as in
 CC (A); (2) a method for producing antibodies which specifically bind to a
 CC MA, comprising administering an isolated immunogenic polypeptide or
 CC fragment to elicit an immune response, where the immunogenic polypeptide
 CC comprises at least 1 ME and has at least 50% identity to a sequence
 CC (see AAM48432) and fragments; and (3) a method for producing antibodies
 CC which specifically bind to a MA comprising administering to a mammal a
 CC plasmid comprising a sequence which encodes at least 1 ME derived from a
 CC polypeptide having an amino acid sequence (see AAM48432) and fragments.
 CC The products and methods can be used for detecting, diagnosing, staging,
 CC monitoring, prognosticating, preventing or treating, or determining
 CC predisposition to diseases or conditions of the breast such as breast
 CC cancer.

XX
 XX Sequence 93 AA:
 SQ

Query Match 100.0%; Score 475; DB 19; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.9e-47;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

YY 1 MKLMLVLMALALSOHCYAGSCGPLENVIKTIINPOVSKTEYKELLOEFIDNATTAID 60
 DB 1 MKLMLVLMALALSOHCYAGSCGPLENVIKTIINPOVSKTEYKELLOEFIDNATTAID 60
 YY 61 ELKECFLNQTDETLSNVEFMQLIYDSSLCDLF 93
 DB 61 ELKECFLNQTDETLSNVEFMQLIYDSSLCDLF 93

RESULT 4
 AAY01718
 ID AAY01718 standard; Protein: 93 AA.
 XX AAY01718:
 XX 25-JUN-1999 (first entry)
 DT
 XX Mammaglobin, a mammary specific protein.
 DE
 XX Human; mammary-specific protein; mammaglobin; antigen; vaccine;
 KM mammaglobin-expressing cancer; breast cancer;
 KM autologous tumor lymphocyte; diagnosis; marker.
 XX Homo sapiens.
 XX MO9914230-A1.
 XX 25-MAR-1999.
 XX 18-SEP-1998: 98WO-US17991.
 XX 18-SEP-1997: 97US-0933149.
 XX (UNIW) UNIV WASHINGTON.
 XX Fleming TP, Watson MA:
 PI
 DR WPI: 1999-244021/20.
 DR N-PSDB: AAX26966.
 XX Mammaglobin, secreted protein overexpressed in breast cancer
 PS
 XX Claim 15; Fig 2; 60pp; English.
 XX The present sequence represents a human mammary-specific protein,
 CC designated mammaglobin. The specification describes a protein
 CC comprising a mammaglobin antigen that is recognized by B and/or
 CC Tc cells specific for the natural, secreted and glycosylated form
 CC of mammaglobin polypeptide. This protein, or recombinant vectors
 CC that express it, are used in vaccines for treating mammaglobin-
 CC expressing cancers, specifically of the breast. Such cancers can
 CC also be treated using autologous tumor lymphocytes activated

CC ex vivo with an mammaglobin antigen, then returned to the
 CC patient. Expression of mammaglobin is elevated in 27% of stage I
 CC primary breast cancers, so it represents a marker useful for
 CC diagnosis of this disease.
 XX
 XX Sequence 93 AA:
 SQ

Query Match 100.0%; Score 475; DB 20; Length 93;
 Best Local Similarity 100.0%; Pred. No. 2.9e-47;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

YY 1 MKLMLVLMALALSOHCYAGSCGPLENVIKTIINPOVSKTEYKELLOEFIDNATTAID 60
 DB 1 MKLMLVLMALALSOHCYAGSCGPLENVIKTIINPOVSKTEYKELLOEFIDNATTAID 60
 YY 61 ELKECFLNQTDETLSNVEFMQLIYDSSLCDLF 93
 DB 61 ELKECFLNQTDETLSNVEFMQLIYDSSLCDLF 93

RESULT 5
 AAB13786
 ID AAB13786 standard; Protein: 93 AA.
 XX AAB13786:
 XX 20-JUN-2001 (first entry)
 DT
 XX Human mammaglobin.
 DE
 XX Human; breast cancer; breast disease detection; mammaglobin;
 KM uteroglobin; chromosome 11q13; BU101; endometrial; cytostatic.
 XX Homo sapiens.
 XX OS
 XX Key Location/Qualifiers
 FH Modified-site 53
 FT Modified-site 68
 FT Modified-site 68 /note= "Optionally N-glycosylated"
 PN MO200035950-A2.
 XX 22-JUN-2000.
 PD
 XX 20-DEC-1999: 99WO-US30489.
 XX 18-DEC-1998: 98US-0215818.
 XX (ABBO) ABBOTT LAB.
 XX Colpitts TL, Russell JE;
 PI
 DR WPI: 2000-442366/38.
 DR N-PSDB: AAA64845.
 XX Multimeric polypeptide antigen and antibody specific to the antigen are
 PT useful for diagnosing, detecting and treating breast cancer -
 PS
 XX Claim 1; Pages 123-124; 124pp; English.
 XX Mammaglobin is a member of the uteroglobin protein family. The
 CC mammaglobin gene has been localised to chromosome 11q13. The present
 CC sequence is the protein sequence for human mammaglobin. The present
 CC invention relates to a multimeric polypeptide antigen, which comprises
 CC of the present sequence and BU101 polypeptide (AAB13787). BU101 is
 CC another uteroglobin protein. The presence of multimeric polypeptide
 CC antigen in a test sample can be used as the basis for a test to diagnose
 CC breast disease e.g. breast cancer, in a patient. The detection can be
 CC carried out using antibodies specific for the multimeric polypeptide
 CC antigen.
 XX
 XX Sequence 93 AA:
 SQ

Query Match 100.0%: Score 475; DB 21; Length 93;
 Best Local Similarity 100.0%: Pred. No. 2.9e-47;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLLVLMIAALSQHCYAGCGPLLENVSKTINPOVSKTEYKELLQEFIDNATTNAID 60
 |||
 DB 1 MKLLVLMIAALSQHCYAGCGPLLENVSKTINPOVSKTEYKELLQEFIDNATTNAID 60
 |||

OY 61 ELKECFUNOTDEFLSNVEVFMOLIVDSSICDLF 93
 |||
 DB 61 ELKECFUNOTDEFLSNVEVFMOLIVDSSICDLF 93
 |||

RESULT 6
 AAT84622
 ID AAY84622 standard; Protein: 93 AA.
 XX
 AC AAY84622;
 XX
 DT 25-JUL-2000 (first entry)
 XX
 XX
 D Amino acid sequence of the mammary-specific protein mammaglobin.
 K Human; mammaglobin; mammary gland; breast cancer; endometrial cancer.
 XX
 XX Homo sapiens.
 OS
 XX WO200018783-A1.
 XX
 PN 06-APR-2000.
 XX
 PD 29-SEP-1999; 99WO-US22616.
 XX
 PF 29-SEP-1999; 99WO-US22616.
 XX
 PR 29-SEP-1998; 98US-0162622.
 XX
 PA (UNIM) UNIV WASHINGTON.
 XX
 PI Watson MA, Fleming TP;
 XX
 XX WPI: 2000-293105/25.
 DR N-PSDB: AAA12632.
 XX
 XX Methods for detecting breast cancer, comprising detecting elevated
 PT concentrations of a mammaglobin polypeptide, using an antibody, or
 PT detecting elevated concentrations of the mRNA encoding the polypeptide,
 PT using oligonucleotides .
 CC
 PS Example 1; Fig 2; 71pp; English.
 XX
 CC The present sequence represents the human mammary-specific secreted
 C protein mammaglobin. Mammaglobin expression is restricted to the
 CC mammary gland. Dysregulation of the mammaglobin gene occurs early
 CC and frequently in breast cancer. The specification describes a method
 CC for detecting the presence of breast cancer in a patient, comprising
 CC detecting an elevated concentration of mRNA encoding a mammaglobin
 CC polypeptide. The methods are useful for detecting the presence of
 CC breast and endometrial cancer.
 CC
 SO Sequence 93 AA:

Query Match 100.0%: Score 475; DB 21; Length 93;
 Best Local Similarity 100.0%: Pred. No. 2.9e-47;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLLVLMIAALSQHCYAGCGPLLENVSKTINPOVSKTEYKELLQEFIDNATTNAID 60
 |||
 DB 1 MKLLVLMIAALSQHCYAGCGPLLENVSKTINPOVSKTEYKELLQEFIDNATTNAID 60
 |||

OY 61 ELKECFUNOTDEFLSNVEVFMOLIVDSSICDLF 93
 |||
 DB 61 ELKECFUNOTDEFLSNVEVFMOLIVDSSICDLF 93
 |||

RESULT 7
 AAE07517
 ID AAE07517 standard; Protein: 93 AA.
 XX
 AC AAE07517;
 XX
 DT 06-NOV-2001 (first entry)
 XX
 XX
 DE Human mammaglobin protein.
 XX
 XX Human; mammaglobin; lipophilin; cytostatic; vaccine; gene therapy;
 KW uteroglobin; cancer; breast; ovary; prostate.
 XX
 XX Homo sapiens.
 OS
 XX WO200158947-A1.
 XX
 PN 16-AUG-2001.
 XX
 PD 08-FEB-2001; 2001WO-US04439.
 XX
 PF 11-FEB-2000; 2000US-0183495.
 XX
 PR 28-JUN-2000; 2000US-0215735.
 XX
 PA (CORI-) CORIXA CORP.
 XX
 PI Carter D, Vedvick TS, Vallieve-Douglas J, Houghton KL, Dillon DC;
 XX
 XX WPI: 2001-497069/54.
 DR N-PSDB: AAD13755.
 XX
 XX Novel isolated complex two lipophilin-like polypeptides linked by at
 PT least one disulfide bond, used to treat or prevent breast, ovarian or
 PT prostate cancer .
 CC
 PS Example 5; Page 72; 91pp; English.
 XX
 CC The invention relates to a complex comprising a lipophilin-like
 CC polypeptide linked by at least one disulfide bond to a second
 CC lipophilin-like polypeptide. Lipophilin-like proteins are members of
 CC uteroglobin superfamily. Lipophilin-like proteins are useful in the
 CC preparation of vaccines. The complex containing lipophilin-like
 CC proteins are useful for treating or preventing breast, ovarian or
 CC prostate cancer. The complex is also used for determining the
 CC presence or absence of cancer in a patient, or monitor the progress
 CC of cancer in a patient. Lipophilin DNA is also useful in gene therapy.
 CC The present sequence is human mammaglobin which is a lipophilin-like
 CC protein.
 CC
 SO Sequence 93 AA:

Query Match 100.0%: Score 475; DB 22; Length 93;
 Best Local Similarity 100.0%: Pred. No. 2.9e-47;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLLVLMIAALSQHCYAGCGPLLENVSKTINPOVSKTEYKELLQEFIDNATTNAID 60
 |||
 DB 1 MKLLVLMIAALSQHCYAGCGPLLENVSKTINPOVSKTEYKELLQEFIDNATTNAID 60
 |||

OY 61 ELKECFUNOTDEFLSNVEVFMOLIVDSSICDLF 93
 |||
 DB 61 ELKECFUNOTDEFLSNVEVFMOLIVDSSICDLF 93
 |||

RESULT 8
 AAB51127
 ID AAB51127 standard; Protein: 93 AA.
 XX
 AC AAB51127;
 XX
 DT 20-MAR-2001 (first entry)
 XX

XX	06-NOV-2001	(first entry)
DT		
XX		
DE	Human mammaglobin S11 3 4 61563.2 protein.	
XX		
KW	Human: lipophilin B; cytostatic; vaccine; mammaglobin S11 3 4 61563.2;	
KM	gene therapy; uterogloblin; cancer; breast; ovary; prostate.	
XX		
OS	Homo sapiens.	
PB	MO200158947-A1.	
PD	16-AUG-2001.	
PN		
PP	08-FEB-2001; 2001WO-US04439.	
PS		
PT	11-FEB-2000; 2000US-0183495.	
XX	28-JUN-2000; 2000US-0215735.	
XX		
PA	(CORI-) CORIXA CORP.	
PI	Carter D, Vedvick TS, Vallieve-Douglass J, Houghton RL, Dillon DC;	
PR	WPI: 2001-497069/54.	
DR	N-PDB: AADJ3775.	
XX		
XX	Novel isolated complex two lipophilin-like polypeptides linked by at	
PT	least one disulfide bond, used to treat or prevent breast, ovarian or	
PT	prostate cancer -	
PS		
XX		
XX	Example 5: Page 79; 91pp; English.	
CC	The invention relates to a complex comprising a lipophilin-like	
CC	polypeptide linked by at least one disulfide bond to a second	
CC	lipophilin-like polypeptide. Lipophilin-like protein are members of	
CC	uteroglobin superfamily. Lipophilin-like proteins are useful in the	
CC	preparation of vaccines. The complex containing lipophilin-like	
CC	proteins are useful for treating or preventing breast, ovarian or	
CC	prostate cancer. The complex is also used for determining the	
CC	presence or absence of cancer in a patient, or monitor the progress	
CC	of cancer in a patient. Lipophilin DNA is also useful in gene therapy.	
CC	The present sequence is human mammaglobin S11 3 4 61563.2 which is	
CC	a lipophilin-like protein.	
XX		
XX		
Sequence	93 AA:	
Query Match	99.8% Score 474; DB 22: Length 93;	
Best Local Similarity	98.9% Pred. No. 3.8e-47;	
Matches 92: Conservative	1; Mismatches 0; Indels 0; Gaps 0;	
OY	1 MKLLMVLMALASQHCYAGSCPLENVIKSTINPOVSKEYKELLOEFIDNATTNAID 60	
DY		
DB	1 MKLLMVLMALASQHCYAGSCPLENVIKSTINPOVSKEYKELLOEFDNDATTNAID 60	
OY	61 ELKECFIANQTDETLSNVVEFMQLIYDSSICDLF 93	
DY		
DB	61 ELKECFILNOTDETLSNVVEFMQLIYDSSICDLF 93	
RESULT 13		
AAE07534		
ID	AAE07534 standard; Protein: 93 AA.	
AC		
XX	AAE07534:	
DT	06-NOV-2001 (first entry)	
XX		
DE	Human mammaglobin variant #1.	
XX		
KW	Human: lipophilin B; cytostatic; vaccine; mammaglobin; variant; mutant;	
KM	gene therapy; uterogloblin; cancer; breast; ovary; prostate; mutein.	
XX		
OS	Homo sapiens	

[illegible]

FT Misc-difference 73 /note= "Wild type Thr substituted with Ser"
 XX
 XX
 PN W0200158947-A1.
 XX
 PD 16-AUG-2001.
 XX
 PE 08-FEB-2001: 2001WO-US04439.
 XX
 PR 11-FEB-2000: 2000US-0183495.
 XX 28-JUN-2000: 2000US-0215735.
 PA (CORI-) CORIXA CORP.
 XX
 PI Carter D, Vedvick TS, Vallieve-Douglass J, Houghton RL, Dillon DC;
 XX
 DR WPI: 2001-497069/54.
 XX N-PSDB: AAD13781.
 XX
 PT Novel isolated complex two lipophilin-like polypeptides linked by at
 PT least one disulfide bond, used to treat or prevent breast, ovarian or
 PT prostate cancer -
 XX
 X Example 6: Page 87-88; 91pp: English.
 XX
 CC The invention relates to a complex comprising a lipophilin-like
 CC polypeptide linked by at least one disulfide bond to a second
 CC lipophilin-like polypeptide. Lipophilin-like protein are members of
 CC uteroglobin superfamily. Lipophilin-like proteins are useful in the
 CC preparation of vaccines. The complex containing lipophilin-like
 CC proteins are useful for treating or preventing breast, ovarian or
 CC prostate cancer. The complex is also used for determining the
 CC presence or absence of cancer in a patient, or monitor the progress
 CC of cancer in a patient. Lipophilin DNA is also useful in gene therapy.
 CC The present sequence is human mammaglobin variant which is obtained by
 CC replacing the 73rd amino acid Thr to Ser. Mammaglobin is a lipophilin-
 CC like protein.
 CC
 XX
 XX Sequence 93 AA:
 SQ
 Query Match 99.2%; Score 471; DR 22; Length 93;
 Best Local Similarity 98.9%; Pred. No. 8.5e-47;
 Matches 92: Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MKLMLVLMALALSOHCYAGSCGPLENVISKTIINPOVSKTEYKELQEFIDNMTNAID 60
 DB 1 MKLMLVLMALALSOHCYAGSCGPLENVISKTIINPOVSKTEYKELQEFIDNMTNAID 60
 QY 61 ELKECFNLQTDETLSNVEFMQLIYDSSLCDLF 93
 DB 61 ELKECFNLQTDETLSNVEFMQLIYDSSLCDLF 93
 RESULT 15
 AAE07536
 ID AAE07536 standard; Protein: 93 AA.
 XX
 AC AAE07536;
 XX
 DT 06-NOV-2001 (first entry)
 XX
 DE Human mammaglobin variant #6.
 XX
 KW Human: lipophilin B; cytosolic; vaccine; mammaglobin; variant; mutant;
 XX gene therapy; uteroglobin; cancer; breast; ovary; prostate; mulein.
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 54 /note= "Wild type Ala substituted with Val"
 XX

PN W0200158947-A1.
 XX
 PD 16-AUG-2001.
 XX
 PE 08-FEB-2001: 2001WO-US04439.
 XX
 PR 11-FEB-2000: 2000US-0183495.
 XX 28-JUN-2000: 2000US-0215735.
 PA (CORI-) CORIXA CORP.
 XX
 PI Carter D, Vedvick TS, Vallieve-Douglass J, Houghton RL, Dillon DC;
 XX
 DR WPI: 2001-497069/54.
 XX N-PSDB: AAD13785.
 XX
 PT Novel isolated complex two lipophilin-like polypeptides linked by at
 PT least one disulfide bond, used to treat or prevent breast, ovarian or
 PT prostate cancer -
 XX
 X Example 6: Page 88; 91pp: English.
 XX
 CC The invention relates to a complex comprising a lipophilin-like
 CC polypeptide linked by at least one disulfide bond to a second
 CC lipophilin-like polypeptide. Lipophilin-like protein are members of
 CC uteroglobin superfamily. Lipophilin-like proteins are useful in the
 CC preparation of vaccines. The complex containing lipophilin-like
 CC proteins are useful for treating or preventing breast, ovarian or
 CC prostate cancer. The complex is also used for determining the
 CC presence or absence of cancer in a patient, or monitor the progress
 CC of cancer in a patient. Lipophilin DNA is also useful in gene therapy.
 CC The present sequence is human mammaglobin variant which is obtained by
 CC replacing the 54th amino acid Ala to Val. Mammaglobin is a lipophilin-
 CC like protein.
 CC
 XX
 XX Sequence 93 AA:
 SQ
 Query Match 99.2%; Score 471; DR 22; Length 93;
 Best Local Similarity 98.9%; Pred. No. 8.5e-47;
 Matches 92: Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 MKLMLVLMALALSOHCYAGSCGPLENVISKTIINPOVSKTEYKELQEFIDNMTNAID 60
 DB 1 MKLMLVLMALALSOHCYAGSCGPLENVISKTIINPOVSKTEYKELQEFIDNMTNAID 60
 QY 61 ELKECFNLQTDETLSNVEFMQLIYDSSLCDLF 93
 DB 61 ELKECFNLQTDETLSNVEFMQLIYDSSLCDLF 93
 Search completed: April 24, 2003, 16:18:57
 Job time : 33.5082 secs.

GenCore version 5.1.4.p5_4578
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OM protein - protein search, using sw model

Run on: April 24, 2003, 16:19:02 ; Search time 14.2623 Seconds
(without alignments)
505.647 Million cell updates/sec

Title: US-09-975-502a-6
Perfect score: 450
Sequence: 1 MKLSVCLLVTLALCCYQAN.....LQKRSLLAEVLVILKKCSV 90

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

--arched: 301932 seqs, 80129803 residues

Total number of hits satisfying chosen parameters: 301932

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications-AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
- 6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 7: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
- 8: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
- 9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match Length	ID	Description
1	450	100.0	90	US-09-975-502a-6	Sequence 6, Appli
2	450	100.0	90	US-09-905-673-35	Sequence 2, Appli
3	450	100.0	90	US-09-905-673-35	Sequence 35, Appli
4	450	100.0	90	US-09-825-301-77	Sequence 77, Appli
5	450	100.0	90	US-09-110-716-29	Sequence 29, Appli
6	450	100.0	90	US-09-934-054-1	Sequence 1, Appli
7	450	100.0	90	US-09-985-911-4	Sequence 4, Appli
8	450	100.0	182	US-09-905-673-61	Sequence 61, Appli
9	447	99.3	90	US-09-905-673-36	Sequence 36, Appli
10	445	98.9	90	US-09-905-673-41	Sequence 41, Appli
11	445	98.9	182	US-09-905-673-60	Sequence 60, Appli
12	440	97.8	90	US-09-905-673-40	Sequence 40, Appli
13	436	96.9	90	US-09-905-673-37	Sequence 37, Appli
14	435	96.7	90	US-09-905-673-39	Sequence 39, Appli
15	433	96.2	90	US-09-905-673-42	Sequence 42, Appli
16	417	92.7	88	US-09-905-673-38	Sequence 38, Appli
17	342	76.0	145	US-09-110-716-37	Sequence 37, Appli
18	342	76.0	145	US-09-905-673-62	Sequence 62, Appli
19	342	76.0	145	US-09-905-673-63	Sequence 63, Appli

20	277	61.6	90	10	US-09-985-911-2	Sequence 27, Appli
21	268	59.6	90	10	US-09-110-716-27	Sequence 44240, A
22	246	54.7	50	10	US-09-864-761-44240	Sequence 260, App
23	238	52.9	83	9	US-09-992-598-260	Sequence 260, App
24	238	52.9	83	9	US-09-989-293A-260	Sequence 260, App
25	238	52.9	83	9	US-09-989-735-260	Sequence 260, App
26	238	52.9	83	9	US-09-990-444-260	Sequence 260, App
27	238	52.9	83	9	US-09-989-730-260	Sequence 260, App
28	238	52.9	83	9	US-09-990-436-260	Sequence 260, App
29	238	52.9	83	9	US-09-991-181-260	Sequence 260, App
30	238	52.9	83	9	US-09-993-687-260	Sequence 260, App
31	238	52.9	83	9	US-09-989-734-260	Sequence 260, App
32	238	52.9	83	9	US-10-028-072-440	Sequence 440, App
33	238	52.9	83	9	US-09-997-653-260	Sequence 260, App
34	238	52.9	83	9	US-09-993-667-260	Sequence 260, App
35	238	52.9	83	9	US-10-121-049-440	Sequence 440, App
36	238	52.9	83	9	US-10-123-904-440	Sequence 440, App
37	238	52.9	83	9	US-10-140-470-440	Sequence 440, App
38	238	52.9	83	9	US-09-990-438-260	Sequence 260, App
39	238	52.9	83	9	US-09-990-562-260	Sequence 260, App
40	238	52.9	83	9	US-09-997-428-260	Sequence 260, App
41	238	52.9	83	9	US-09-997-666-260	Sequence 260, App
42	238	52.9	83	9	US-10-175-746-440	Sequence 440, App
43	238	52.9	83	9	US-10-176-918-440	Sequence 440, App
44	238	52.9	83	9	US-10-176-921-440	Sequence 440, App
45	238	52.9	83	9	US-09-990-711-260	Sequence 260, App

ALIGNMENTS

RESULT 1
US-09-975-502a-6
Sequence 6, Application US/09975502A
Publication No.: US20030044859A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Henslee, Jerry G.
TITLE OF INVENTION: REAGENTS AND METHODS USEFUL FOR
FILE REFERENCE: 5972.US.P7
CURRENT APPLICATION NUMBER: US/09/975,502A
CURRENT FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US 09/467,602
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: US 09/215,818
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: US 08/912,276
PRIOR FILING DATE: 1997-08-15
PRIOR APPLICATION NUMBER: US 08/697,105
PRIOR FILING DATE: 1996-08-19
PRIOR APPLICATION NUMBER: US 08/912,149
PRIOR FILING DATE: 1997-08-15
PRIOR APPLICATION NUMBER: US 08/697,106
PRIOR FILING DATE: 1996-08-19
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FASTED for Windows Version 4.0
SEQ ID NO 6
LENGTH: 90
TYPE: PRT
ORGANISM: Homo sapiens
US-09-975-502a-6
Query Match 100.0% Score 450; DB 9; Length 90;
Best local Similarity 100.0% Pred No. 2, 2e-45;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFETSEPLFKLSLAKFNAPAEAAAKL 60
DB 1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFETSEPLFKLSLAKFNAPAEAAAKL 60
QY 61 GVKKCTDMSLQKRSLLAEVLVILKKCSV 90

Db 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90

RESULT 2

US-09-905-673-2
Sequence 2, Application US/09905673
Publication NO. US20030059432A1

GENERAL INFORMATION:
APPLICANT: DILLON, DAVID C.
APPLICANT: FANGER, GARY R.
TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
FILE REFERENCE: 210121.498C1
CURRENT APPLICATION NUMBER: US/09/905.673
CURRENT FILING DATE: 2001-07-13
NUMBER OF SEQ ID NOS: 67
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 90
TYPE: PR1
ORGANISM: Homo sapien
US-09-905-673-2

Query Match 100.0%; Score 450; DB 9; Length 90;
Best Local Similarity 100.0%; Pred. No. 2.2e-45;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
Db 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60

Qy 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90
Db 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90

RESULT 3

US-09-905-673-35
Sequence 35, Application US/09905673
Publication NO. US20030059432A1

GENERAL INFORMATION:
APPLICANT: DILLON, DAVID C.
APPLICANT: FANGER, GARY R.
TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
FILE REFERENCE: 210121.498C1
CURRENT APPLICATION NUMBER: US/09/905.673
CURRENT FILING DATE: 2001-07-13
NUMBER OF SEQ ID NOS: 67
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 35
LENGTH: 90
TYPE: PR1
ORGANISM: Homo sapiens
US-09-905-673-35

Query Match 100.0%; Score 450; DB 9; Length 90;
Best Local Similarity 100.0%; Pred. No. 2.2e-45;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
Db 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60

Qy 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90
Db 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90

RESULT 4

US-09-825-301-77
Sequence 77, Application US/09825301

Patent No. US2002009738A1

GENERAL INFORMATION:
APPLICANT: Houghton, Raymond L.
APPLICANT: DILLON, DAVID C.
APPLICANT: MOLESB, DAVID A.
APPLICANT: XU, JIANGCHUN
APPLICANT: ZEHENTNER, BARBARA
TITLE OF INVENTION: METHODS, COMPOSITIONS AND KITS FOR THE DETECTION
FILE REFERENCE: 210121.513
CURRENT APPLICATION NUMBER: US/09/825.301
CURRENT FILING DATE: 2001-04-02
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 77
LENGTH: 90
TYPE: PR1
ORGANISM: Homo sapiens
US-09-825-301-77

Query Match 100.0%; Score 450; DB 10; Length 90;
Best Local Similarity 100.0%; Pred. No. 2.2e-45;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
Db 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60

Qy 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90
Db 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90

RESULT 5

US-09-110-716-29
Sequence 29, Application US/09110716A
Patent No. US20020034739A1

GENERAL INFORMATION:
APPLICANT: Lehner, Robert I.
APPLICANT: Zhao, Chengquan
TITLE OF INVENTION: PEPTIDES CHARACTERISTIC OF CERTAIN TUMORS
FILE REFERENCE: 22000-20596.00
CURRENT APPLICATION NUMBER: US/09/110.716A
CURRENT FILING DATE: 1998-07-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 29
LENGTH: 90
TYPE: PR1
ORGANISM: lipophilin B
US-09-110-716-29

Query Match 100.0%; Score 450; DB 10; Length 90;
Best Local Similarity 100.0%; Pred. No. 2.2e-45;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
Db 1 MKLSVCLLVTLALCCYOANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60

Qy 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90
Db 61 GVKRCTDOMSLQKRSLSIAEVLVKILKCSV 90

RESULT 6

US-09-934-054-1
Sequence 1, Application US/09934054
Patent No. US20020107385A1
GENERAL INFORMATION:
APPLICANT: Akertblom, Ingrid E.

```

: SOFTWARE: PatentIn version 3.1
:
: SEQ ID NO 4
:
: LENGTH: 90
:
: TYPE: PKT
:
: ORGANISM: Human
US-09-985-911-4
:

Query Match          100.0%; Score 450; DB 10; length 90;
Best local Similarity 100.0%; Pred. NO. 2.2e-45;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MKSVCLLVLTALCCYQNAEFCPALVSELDFFIFSEPLFKLSLAKFDAPPEAVAAKL 60
        |||||||
Db       1 MKSVCLLVLTALCCYQNAEFCPALVSELDFFIFSEPLFKLSLAKFDAPPEAVAAKL 60
        |||||||

QY      61 GVKRCTDQMSLOKRSLLAEVLVKILKCSV 90
        |||||||
Db       61 GVKRCTDQMSLOKRSLLAEVLVKILKCSV 90
        |||||||

RESULT 8
US-09-905-673-61
: Sequence 61, Application US/09905673
: Publication NO. US20030059432A1
: GENERAL INFORMATION:
: APPLICANT: Dillon, Davin C.
: APPLICANT: Fanger, Gary R.
: TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
: FILE REFERENCE: 210121.49RC1
: CURRENT APPLICATION NUMBER: US/09/905.673
: CURRENT FILING DATE: 2001-07-13
: NUMBER OF SEQ ID NOS: 67
: SOFTWARE: FASTED for Windows Version 3.0
: SEQ ID NO 61
:
: LENGTH: 182
:
: TYPE: PRT
:
: ORGANISM: Homo sapiens
US-09-905-673-61

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US-09-905-673-36
; Sequence 36, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillion, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPY
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 36
; LENGTH: 90
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-673-36

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Query Match 99.3%: Score 447; DB 9; Length 90;
Best Local Similarity 98.9%: Pred. No. 4.9e-45;
Matches 89; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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|||||
DB 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||

OY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||
DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||

RESULT 10
US-09-905-673-41
; Sequence 41, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 41
; LENGTH: 90
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-673-41

Query Match 98.9%: Score 445; DB 9; Length 90;
Best Local Similarity 98.9%: Pred. No. 8.4e-45;
Matches 89; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||
DB 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||

OY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||
DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||

RESULT 11
US-09-905-673-60
; Sequence 60, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 60
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-673-60

Query Match 98.9%: Score 445; DB 9; Length 182;
Best Local Similarity 100.0%: Pred. No. 1.9e-44;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2 KLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 61
|||||
DB 94 KLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 153
|||||

OY 62 VKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||
DB 154 VKRCTDOMSLQKRSLLAEVLVKILKKCSV 182
|||||

RESULT 12
US-09-905-673-40
; Sequence 40, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 40
; LENGTH: 90
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-673-40

Query Match 97.8%: Score 440; DB 9; Length 90;
Best Local Similarity 98.9%: Pred. No. 3.2e-44;
Matches 89; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||
DB 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||

OY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||
DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||

RESULT 13
US-09-905-673-37
; Sequence 37, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 90
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-673-37

Query Match 96.9%: Score 436; DB 9; Length 90;
Best Local Similarity 97.8%: Pred. No. 9.4e-44;
Matches 88; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||
DB 1 MKLSVCLLVTLALCCYQVANAFCPCALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
|||||

OY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||
DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
|||||

RESULT 14

US-09-905-673-39

Sequence 39, Application US/09905673

Publication No. US20030059432A1

; GENERAL INFORMATION:

APPLICANT: Dillon, Davin C.

APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: LIPOPHILIC COMPLEXES FOR USE IN CANCER

1. TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR THE TREATMENT OF ALLERGIC DISEASES

FILE REFERENCE: 210121 498C1

FILE REFERENCE: 210121.498C1
CURRENT APPLICATION NUMBER: IIS/0

CURRENT FILING DATE: 2001-07-13

NUMBER OF SEO ID NOS: 67

; NUMBER OF SEQ
; SOFTWARE: FAS

; SEQ ID NO 39

; LENGTH: 90

TYPE: PRT

ORGANISM: HO

Query Match	Score	DB	Length
96.78;	435;	9;	90

Best Local Similarity 97.8%; Pred. No. 1.2e+43;

Matches	88;	Conservative	0;	Mismatches	2;	Indels	0;	Gaps	0;
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QY 1 MKLSVCLLTVTALCCQANAECFPALVSELDFFIISEPLFKSLAKCDAPPEAVAAKL 600

Db 1 MKLSVCLLTVTALCCQANAECFPALVPELDFFIISEPLFKSLAKCDAPLEAVAAKL 600

```

Oy      61 GVKRCTDQMSLQKRSI,IAEVLVKILKCSV  90
          |||||
Db      61 GVKRCTDQMSLQKRSI,IAEVLVKILKCSV  90

```

RESULT 15
US-09-905

; Sequence 42, A

Publication No. US20030059432A1

GENERAL INFORMATION:

APPLICANT: DILLON,

APPLICANT: Fanger, Gary R.

1. TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER

; TITLE OF INVENTION: DIAGNOSIS AND THERAPY

FILE REFERENCE: 210121.498C1

; CURRENT APPLICATION NUMBER: US/0
CURRENT FILING DATE: 2001-07-13

; CURRENT FILING DATE: 2001-07-13
 NUMBER OF CREDITS: 67

NUMBER OF SEQ ID NOS: 67
SOFTWARE: Easel-Seq for Windows Version 3.0

SOFTWARE: PAS
: SEO ID NO 42

: SEQ ID NO 42
: LENGTH: 90; LENGTH: 90
TYPE: PRT; type: PRT
: ORGANISM: Homo sapiens

ORGANISM: HO
115-09-905-673-42

query	match	score	db %	length
Best Local Similarity	97.88;	Pred. No.	2.1e-43;	

Matches 88; Conservative 0; Mismatches 2

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1 MKLSVCLLTTLTAICGYANAERC PALVSELDFFISEPLFKLSLAKFDAPLEA VAAKL 600

61 GVKCITDQMSLQKRSLIAEVIKILKKCSV 90

Search completed: April 24, 2003, 16:21:58
Job time : 14.2623 secs

GenCore version 5.1.4-p5_4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 24, 2003, 16:13:12 ; Search time 30.4918 Seconds
(without alignments)
393.304 Million cell updates/sec

Title: US-09-975-502a-6
Perfect score: 450
Sequence: 1 MKLSVCLLVTLALCCYQAN.....LQKSLIAEVLVKKCSV 90

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Numbered: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A.Geneseq_101002:*

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2:	/SID52/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*
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4:	/SID52/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*
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Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	450	100.0	90	18	AAW35803
2	450	100.0	90	19	AAW59776
3	450	100.0	90	19	AAW54271
4	450	100.0	90	20	AAW89613
5	450	100.0	90	21	AAW13787
6	450	100.0	90	21	AAW87501
7	450	100.0	90	21	AAW87501
8	450	100.0	90	21	AAW84875
9	450	100.0	90	22	AAW5989
10	450	100.0	90	22	AAW57518

11	450	100.0	90	22	AAW31681
12	450	100.0	90	22	AAW89634
13	450	100.0	117	22	AAW11907
14	450	100.0	120	20	AAW48606
15	447	99.3	90	22	AAW87521
16	445	98.9	90	22	AAW87525
17	440	97.8	90	22	AAW87524
18	436	96.9	90	22	AAW87522
19	435	96.7	90	22	AAW87526
20	434.5	96.6	89	23	AAW20554
21	433	96.2	90	22	AAW87527
22	417	92.7	88	22	AAW87523
23	342	76.0	69	19	AAW54279
24	342	76.0	69	21	AAW87509
25	277	61.6	90	18	AAW35802
26	277	61.6	90	21	AAW87509
27	277	61.6	90	21	AAW87509
28	277	61.6	90	23	AAW87509
29	267	59.3	53	21	AAW87509
30	267	59.3	53	21	AAW87509
31	267	59.3	90	22	AAW23955
32	261	58.0	90	22	AAW20553
33	254	56.4	102	22	AAW87566
34	246	54.7	50	22	AAW87507
35	246	54.7	50	22	AAW87507
36	246	54.7	50	22	AAW87507
37	246	54.7	50	22	AAW87507
38	246	54.7	50	22	AAW87507
39	244	54.2	79	20	AAW59999
40	242	53.8	92	22	AAW87507
41	238	52.9	83	21	AAW87507
42	238	52.9	83	21	AAW87507
43	238	52.9	83	22	AAW12391
44	238	52.9	83	22	AAW87507
45	219	48.7	45	19	AAW54278

ALIGNMENTS

RESULT 1
AAW35803
ID AAW35803 standard; protein; 90 AA.

AC AAW35803:

XX 27-MAR-1998 (first entry)

XX Human endometrial specific steroid-binding factor II.

XX Endometrial specific steroid-binding factor II; ESF II; human:

KW Clara cell secretory protein; endometrium;

KW phospholipase A2 inhibitor; polychlorinated biphenyl; antiaggregant;

KW inflammation; asthma; rhinitis; cystic fibrosis; airway disease;

KW neoplasia; atopy; therapy; diagnosis.

XX Homo sapiens.

XX

XX Key Location/Qualifiers

FT Peptide 1..21 /label= Sig_peptide

FT Protein 22..90 /label= Mat_protein

XX

XX W09734997-A1.

XX

XX 25-SEP-1997.

XX

XX 21-MAR-1996; 96MO-US03857.

XX

XX 21-MAR-1996; 96MO-US03857.

XX

XX (HUMA-) HUMAN GENOME SCI INC.

XX Gentz RL, Ni J, Yu G;
 XX
 DR WPI: 1997-480206/44.
 XX
 DR N-PSDB: AAT94831.
 XX
 PT Human endometrial specific steroid-binding factor I, II and III -
 PT used to treat inflammation, asthma, rhinitis, cystic fibrosis,
 PT allergy disease, neoplasia, atopy etc.
 XX
 PS Claim 18: Page 63-64: 92pp: English.
 XX
 CC This sequence comprises human endometrial specific steroid binding
 CC factor II (ESF II), a protein that inhibits phospholipase A2
 CC activity, binds to polychlorinated biphenyl compounds, reduces
 CC foreign protein antigenicity, inhibits monocyte and neutrophil
 CC chemotaxis and phagocytosis, inhibits platelet aggregation,
 CC regulates eicosanoid levels in the human uterus and controls the
 CC growth of endometrial cells. The amino acid sequence was deduced
 CC from a cDNA clone (see AAT94831) derived from cycloheximide-treated
 CC CEM cells. ESF I (see AAW35802) and ESF III (see AAW35804) are also
 CC claimed. Human ESF II has about 49% identity with rat prostatic
 CC steroid-binding protein. Recombinant ESF I, II and III can be
 CC expressed in host cells for use in claimed methods (a) for treating
 CC a patient in need of ESF I, II or III (including expression of the
 CC polypeptide in vivo) and (b) for identifying compounds which bind
 CC to and inhibit activation of the ESF polypeptide. hESF I, II and
 CC III may be used to treat inflammation, asthma, rhinitis, cystic
 CC fibrosis, allergy disease, neoplasia and atopy.
 XX
 SO Sequence 90 AA:
 Query Match 100.0%; Score 450; DB 18; Length 90;
 Best Local Similarity 100.0%; Pred. No. 9.2e-51;
 Matches 90: Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLSYCLLVTLALCCCYANAFPCPALVSELDFFFISEPLFKSLAKFDAPPEVAAKL 60
 DB 1 MKLSYCLLVTLALCCCYANAFPCPALVSELDFFFISEPLFKSLAKFDAPPEVAAKL 60
 DB 1 MKLSYCLLVTLALCCCYANAFPCPALVSELDFFFISEPLFKSLAKFDAPPEVAAKL 60
 QY 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90
 DB 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90

RESULT 2
 AAW59776
 ID AAW59776 standard; Protein: 90 AA.
 XX
 AC AAW59776;
 XX
 D 12-OCT-1998 (first entry)
 XX
 DE Amino acid sequence of the human steroid binding protein C1.
 XX
 KW Human steroid-binding protein C1: hSBP1, hSBP2, breast cancer; probe;
 KW gene therapy vector; ribozyme; probe; hybridisation; amplification;
 KW antibody; immunoassay.
 XX
 OS Homo sapiens.
 XX
 PN MO9821331-A1.
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 PD 22-MAY-1998.
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 PE 07-NOV-1997; 97WO-US20674.
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 PR 12-NOV-1996; 96US-0747547.
 XX
 PI (INCYT) INCYTE PHARM INC.
 XX
 PA Akerblom LE, Goll SK, Hawkins PR, Hillman JL, Murry LE;
 XX
 PY

DR WPI: 1998-297935/26.
 DR
 DR N-PSDB: AAV41579.
 XX
 XX
 PT New human steroid binding proteins C1 and C2 - useful for, e.g.,
 PT diagnosis, monitoring and treating breast cancer, and for drug
 PT screening
 XX
 PS Claim 1: Fig 1: 70pp: English.
 XX
 CC This is the amino acid sequence of the human steroid-binding protein
 CC C1 (hSBP1) used in the method of the invention for the diagnosis,
 CC monitoring and treatment of breast cancer. hSBP1 and hSBP2 are useful
 CC as markers for breast cancer, i.e. measuring levels of hSBP1 and hSBP2
 CC used for diagnosis or monitoring the disease, to identify subjects
 CC at risk and to discriminate between different forms of cancer for
 CC selection of appropriate therapies. They may also be used for drug
 CC screening. Nucleic acids encoding hSBP1 and hSBP2 can be used in gene
 CC therapy vectors to overexpress the steroid-binding proteins, preventing
 CC binding of steroids, or antisense sequences, ribozymes. Their nucleic
 CC acids can also be used for the diagnosis and monitoring (by quantifying
 CC expression of hSBP), as source of probes for hybridisation and
 CC amplification of genomic or related sequences for studying regulation of
 CC gene function and for mapping the genomic sequence. Antibodies are used
 CC as diagnostic reagents in standard immunoassays for hSBP.
 XX
 SO Sequence 90 AA:
 Query Match 100.0%; Score 450; DB 19; Length 90;
 Best Local Similarity 100.0%; Pred. No. 9.2e-51;
 Matches 90: Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLSYCLLVTLALCCCYANAFPCPALVSELDFFFISEPLFKSLAKFDAPPEVAAKL 60
 DB 1 MKLSYCLLVTLALCCCYANAFPCPALVSELDFFFISEPLFKSLAKFDAPPEVAAKL 60
 DB 1 MKLSYCLLVTLALCCCYANAFPCPALVSELDFFFISEPLFKSLAKFDAPPEVAAKL 60
 QY 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90
 DB 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90

RESULT 3
 AAW54271
 ID AAW54271 standard; Protein: 90 AA.
 XX
 AC AAW54271;
 XX
 DT 29-JUL-1998 (first entry)
 XX
 DE BU101 antigenic peptide epitope 1.
 XX
 KW BU101: breast cancer; diagnosis; prevention; treatment; gene therapy;
 KW immunisation; drug screening; epitope.
 XX
 OS Homo sapiens.
 XX
 PN MO9807857-A1.
 XX
 PD 26-FEB-1998.
 XX
 PE 19-AUG-1997; 97WO-US14665.
 XX
 PR 15-AUG-1997; 97US-0912276.
 XX
 PR 19-AUG-1996; 96US-0697105.
 XX
 PA (ABBO) ABBOTT LAB.
 XX
 PI Billing-medel PA, Cohen M, Colpitts TL, Friedman RN;
 PI Gordon J, Granadosen, Hodges SC, Klass MK, Kralovich JL;
 PI Roberts-rapp L, Russell JC, Stroupe SD;
 XX
 DR WPI: 1998-169161/15.
 DR
 DR N-PSDB: AAV26461.
 XX

PT	New BU101 protein over-expressed in breast cancer - useful for, e.g.
PT	diagnosis, treatment and prevention of breast cancer
XX	Claim 17: page 90; 105pp; English.
PS	
CC	This represents a BU101 polypeptide sequence. BU101 is a member of the
CC	uteroglobin family of proteins and is over-expressed in breast cancer.
CC	Cells transformed with a recombinant expression system comprising a
CC	sequence derived from the BU101 open reading frame and with at least 50
CC	percent identity to the sequences shown in AAV26458 to AAV26461 are used
CC	to produce BU101 polypeptides containing at least 1 epitope. These are
CC	used to detect BU101-specific antibodies which are used correspondingly
CC	to detect BU101 antigens. The BU101 polynucleotide sequences can be used
CC	in a method for detecting the presence of a target BU101 polynucleotide.
CC	The various assays are used for diagnosis, prognosis, staging,
CC	monitoring, treating and preventing diseases of the breast (especially
CC	cancer and its metastases), and also for determining susceptibility. The
CC	BU101 polypeptides are also useful in drug screening, e.g. to identify
CC	antagonists of BU101, potentially useful therapeutically and as targets
CC	for therapy. The antibodies are also useful for targeted drug delivery
CC	and therapeutically to neutralise BU101 polypeptides. Fragments of the
CC	CC BU101 nucleic acid are useful as probes and primers, e.g. for detection
CC	of altered gene expression or in fluorescent in situ hybridisation, also
CC	in gene therapy to generate antisense or ribozyme molecules or for
CC	genetic immunisation.
XX	
CC	
SQ	Sequence 90 AA:
	Query Match 100.0%; Score 450; DB 19; Length 90;
	Best Local Similarity 100.0%; Pred. No. 9.2e-51;
	Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	1 MKLSVCLLVTLALCCYANAEFCALVSELDFFRISPLFKSLAFDAPPEVAAKL 60
DB	1 MKLSVCLLVTLALCCYANAEFCALVSELDFFRISPLFKSLAFDAPPEVAAKL 60
OY	61 GVKRCTDQMSLOKRSLIAEVLVILKKCSV 90
DB	61 GVKRCTDQMSLOKRSLIAEVLVILKKCSV 90
RESULT 4	
AAW89613	
ID	AAW89613 standard; Protein: 90 AA.
..	
AAW89613:	
DT	25-MAR-1999 (first entry)
XX	
DE	Endometrial steroid binding protein II.
XX	
KW	Endometrial steroid binding protein II; ESRPII; cancer; detection;
KM	endometriosis; endometrial fibroid; mammary cancer.
XX	
OS	Homo sapiens.
XX	
PN	MO9856248-A1.
XX	
PD	17-DEC-1998.
XX	
PF	09-JUN-1998; 98WO-US12053.
XX	
PR	09-JUN-1997; 97US-0049015.
XX	
PA	(SMIK) SMITHKLINE BEECHAM CORP.
XX	
PI	Schmidt CJ, Wang X;
XX	
DR	WPI: 1999-080843/07.
XX	
DR	N-PSDB: AAX00069.
XX	
PT	Treatment of endometrial cancer, mammary cancer, endometriosis of
PT	endometrial fibroids - comprises administering endometrial steroid

PT	binding protein II antagonist
XX	
PS	Disclosure: Page 13: 19pp: English.
CC	
CC	A method has been developed for the treatment of endometrial cancer,
CC	mammary cancer, endometriosis or endometrial fibroids. The method
CC	comprises administering endometrial steroid binding protein II (ESBP11)
CC	antagonist. Also described in the present invention are: (1) a method
CC	for diagnosing the above mentioned diseases comprising analysing the
CC	abnormally high level of ESBP11 polypeptide in cells, tissues and bodily
CC	fluids; and (2) a diagnostic method for the diseases described above
CC	comprising analysing the abnormally high or low transcription level of
CC	ESBP11 in cells, tissues and bodily fluids. The methods can be used to
CC	diagnose, treat and monitor the progression, remission or recurrence of
CC	abnormal cell growth, such as cancers, especially endometrial and
CC	mammary cancer, and endometriosis and endometrial fibroids. The present
CC	sequence represents ESBP11, from the present invention.
XX	
SO	Sequence 90 AA:
	Query Match 100.0%; Score 450; DB 20; Length 90;
	Best Local Similarity 100.0%; Pred. No. 9.2e-51;
	Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 MKLSVCLLVLTALCCYQANAEEFCALVSELDFFFISEPLFKLSLAFDAPPEVAAKL 60
DB	1 MKLSVCLLVLTALCCYQANAEEFCALVSELDFFFISEPLFKLSLAFDAPPEVAAKL 60
QY	61 GVKRCTDQMSLQKRSLSIAEVLVKILKKCSV 90
DB	61 GVKRCTDQMSLQKRSLSIAEVLVKILKKCSV 90
RESULT 5	
AABI3787	
ID	AABI3787 standard; Protein: 90 AA.
XX	
AC	AABI3787:
XX	
DT	20-JUN-2001 (first entry)
XX	
DE	Human BU101.
XX	
KW	Human; breast cancer; breast disease detection; mammarylobin;
KW	uterojobin; BU101; endometrial; cytostatic.
XX	
OS	Homo sapiens.
XX	
FM	Key Location/Qualifiers
FT	Misc-difference 53
FT	/label= leu
FT	/note= "Encoded by CPG in polymorphic variant"
XX	
PN	MO200035950-A2.
XX	
PD	22-JUN-2000.
XX	
PF	20-DEC-1999; 99WO-US30489.
XX	
PR	18-DEC-1998; 98US-0215818.
XX	
PA	(ABBO) ABBOTT LAB.
XX	
PI	Colpites TL, Russell JE;
XX	
DR	WPI: 2000-442366/38.
XX	
XX	N-PSDB: AAA64846.
PT	Multimeric polypeptide antigen and antibody specific to the antigen are
XX	useful for diagnosing, detecting and treating breast cancer -
PS	Claim 1: Page 124: 124pp: English.
XX	

CC BU101 is a member of the uteroglobin protein family. The present
 CC sequence is the protein sequence for human BU101. The present
 CC invention relates to a multimeric polypeptide antigen, which comprises
 CC of the present sequence and mamaglobin polypeptide (AAB13786).
 CC Mamaglobin is another uteroglobin protein. The presence of multimeric
 CC polypeptide antigen in a test sample can be used as the basis for a test
 CC to diagnose breast disease e.g. breast cancer, in a patient. The
 CC detection can be carried out using antibodies specific for the multimeric
 CC polypeptide antigen. The present sequence can either have a pro or leu
 CC residue at position 53, since the coding sequence has a single
 CC nucleotide T/C polymorphism at nucleotide position 254.

XX Sequence 90 AA:
 SQ
 Query Match 100.0%; Score 450; DB 21; Length 90;
 Best Local Similarity 100.0%; Pred. No. 9.2e-51;
 Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCYQVNAEFCPALVSELDFFETSEPLFKLSLAKFDAPPEAVAKL 60
 DB 1 MKLSVCLLVTLALCCYQVNAEFCPALVSELDFFETSEPLFKLSLAKFDAPPEAVAKL 60
 C 61 GVKRCTDQMSLQKRSLAEVLVKILKKCSV 90
 L 61 GVKRCTDQMSLQKRSLAEVLVKILKKCSV 90

RESULT 6
 AAB07501
 ID AAB07501 standard; Protein: 90 AA.
 AC AAB07501;
 XX
 DT 20-OCT-2000 (first entry)
 XX
 DE Amino acid sequence of a human BU101 polypeptide.
 KW Human: BU101; breast disease.
 XX
 OS Homo sapiens.
 XX
 PN W0200041516-A2.
 XX
 PD 20-JUL-2000.
 XX
 PE 19-JAN-2000; 2000MO-US01309.
 XX
 PR 19-JAN-1999; 99US-0233693.
 XX
 PA (ABBO) ABBOTT LAB.
 XX
 P 3111ing-medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;
 P Granados EN, Hodges SC, Klass MR, Kratochvill JD, Roberts-rapp L;
 PI Russell JC, Scheffel CP, Stroupe SD;
 XX
 DR WPI: 2000-475906/41.
 DR N-PSDB: AAA58880.

XX
 PS
 XX Claim 23: Page 125: 127pp; English.

CC The present sequence represents a BU101 polypeptide. The BU101 gene is
 CC transcribed from breast tissue. The specification describes a method for
 CC detecting the presence of a target BU101 polynucleotide in a test
 CC sample. The method comprises contacting the sample with at least one
 CC BU101-specific polynucleotide (AAA58875-80), and detecting bound
 CC polynucleotides. The method and BU101 polynucleotides are useful for
 CC detecting the presence of BU101 polynucleotides. The methods may be
 CC used for the diagnosis of breast disease, indicated by the formation
 CC of complexes.

XX Sequence 90 AA:
 SQ
 Query Match 100.0%; Score 450; DB 21; Length 90;
 Best Local Similarity 100.0%; Pred. No. 9.2e-51;
 Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCYQVNAEFCPALVSELDFFETSEPLFKLSLAKFDAPPEAVAKL 60
 DB 1 MKLSVCLLVTLALCCYQVNAEFCPALVSELDFFETSEPLFKLSLAKFDAPPEAVAKL 60
 OY 61 GVKRCTDQMSLQKRSLAEVLVKILKKCSV 90
 DB 61 GVKRCTDQMSLQKRSLAEVLVKILKKCSV 90

RESULT 7
 AAB03768
 ID AAB03768 standard; Protein: 90 AA.
 XX
 AC AAB03768;
 XX
 DT 06-OCT-2000 (first entry)
 XX
 DE Human endometrial specific steroid-binding factor II protein sequence.
 KW Endometrial specific steroid-binding factor; human; hESF; inflammation;
 KW asthma; rhinitis; cystic fibrosis; air way disease; neoplasia; atopy;
 KW eicosanoid level regulator; chemotaxis inhibitor; endometrial cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6066724-A.
 XX
 PD 23-MAY-2000.
 XX
 PE 21-MAR-1997; 97US-0821451.
 XX
 PR 21-MAR-1996; 96US-0014724.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Yu G, Gentz R, Ni J;
 XX
 DR WPI: 2000-375600/32.
 DR N-PSDB: AAA59729.

XX
 PS
 XX Claim 1: Fig 2: 36pp; English.

CC This invention relates to nucleic acid molecules encoding portions of the
 CC human endometrial specific steroid-binding factors I, II, and III. Also
 CC included in the invention are hESF I, II, and III polypeptide sequences.
 CC The nucleotide sequence exhibit antiasthmatic, antiinflammatory,
 CC antiallergic, and cytostatic properties. The polynucleotides are used in
 CC gene therapy to express hESF I, II and III polynucleotides in vivo to treat
 CC and/or prevent inflammation, asthma, rhinitis, cystic fibrosis, air way
 CC disease, neoplasia and atopy. The polynucleotides are also used to
 CC inhibit phospholipase A2 activity, bind polychlorinated biphenyls, reduce
 CC foreign protein antigenicity, inhibit monocyte and neutrophil chemotaxis
 CC and phagocytosis, inhibit platelet aggregation, regulate eicosanoid
 CC levels in the human uterus and control the growth of endometrial cells.
 CC The polynucleotides are also useful for detecting complementary
 CC polynucleotides as a diagnostic reagent. The hESF I, II and III
 CC polynucleotides are used to detect complementary polynucleotides such as
 CC a diagnostic reagent. Detection of a mutated form of hESF I, II and III
 CC associated with a dysfunction will provide a diagnostic tool that can
 CC define diagnosis of a disease or susceptibility to a disease which
 CC results from under-expression, over-expression or altered expression of
 CC hESF I, II and III e.g. a susceptibility to inherited asthma and

CC endometrial cancer. They are also useful for chromosome identification.
CC The present sequence represents a hsp70 protein sequence identified in
CC the invention.

XX Sequence 90 AA:

Query Match 100.0%; Score 450; DB 21; Length 90;
Best Local Similarity 100.0%; Pred. No. 9.2e-51;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAAVAKL 60
1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAAVAKL 60

DB 61 GVKRCTDMSLOKRSLLAEVLYLKKCSV 90
61 GVKRCTDMSLOKRSLLAEVLYLKKCSV 90

RESULT 8
AAV84875
ID AAV84875 standard; Protein; 90 AA.

XX AAV84875;

DT 08-AUG-2000 (first entry)

DE A human endometrial specific steroid-binding protein II.

XX Human: endometrial specific steroid-binding protein II; ESBP11;
KM breast tumor; prostate cancer; gynaecological cancer; cancer;
KM endometrial cancer; ovarian cancer; uterine cancer.

XX Homo sapiens.

PN WO200020043-A1.

PD 13-APR-2000.

PF 05-OCT-1999; 99WO-US23252.

PR 05-OCT-1998; 98US-0103093.

PA (DIAD-) DIADEXUS LLC.

XX Macina RA;

DR WPI: 2000-303648/26.

XX N-PSDB: AAA14953.

PT Diagnosing, staging, monitoring, imaging and treating prostate and
PT gynaecological cancers by measuring levels of endometrial specific
PT steroid-binding protein (ESBP)II expression

PS Claim 6: Page 31-32: 35pp: English.

XX The present sequence represents a human endometrial specific steroid-
CC binding protein (ESBP) II. The ESBP protein is overexpressed in
CC breast tumors. The specification describes a method for diagnosing
CC prostate or a gynaecological cancer. The method comprises measuring
CC levels of ESBP in cells, tissues or body fluids of a patient, and
CC comparing this to levels from a normal control, where a variance in
CC levels indicates cancer. The method is used to diagnose, stage, monitor,
CC image or treat prostate or gynaecological cancer. The gynaecological
CC cancers include breast, endometrial, ovarian and uterine cancer.

XX Sequence 90 AA:

Query Match 100.0%; Score 450; DB 21; Length 90;
Best Local Similarity 100.0%; Pred. No. 9.2e-51;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAAVAKL 60

DB 1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAAVAKL 60

QY 61 GVKRCTDMSLOKRSLLAEVLYLKKCSV 90
61 GVKRCTDMSLOKRSLLAEVLYLKKCSV 90

RESULT 9
AAC65989
ID AAC65989 standard; Protein; 90 AA.

XX AAC65989;

DT 11-FEB-2002 (first entry)

DE Lipophilin B polypeptide.

XX Genetic subtraction: DNA microarray analysis; polymerase chain reaction;
KM cancer; B726P; Lipophilin B; mamaglobin.

XX Homo sapiens.

PN WO200175171-A2.

PD 11-OCT-2001.

PF 02-APR-2001; 2001WO-US10631.

PR 03-APR-2000; 2000US-194241P.

PR 20-JUL-2000; 2000US-219862P.

PR 27-JUL-2000; 2000US-221300P.

PR 18-DEC-2000; 2000US-256592P.

XX (CORI-) CORIXA CORP.

PA Houghton RL, Dillon DC, Molash DA, Xu J, Zehentner R, Persing DH;

XX Houghton RL, Dillon DC, Molash DA, Xu J, Zehentner R, Persing DH;

PI WPI: 2001-626449/72.

XX N-PSDB: AA167269.

PT Identifying tissue (tumour)-specific polynucleotides overexpressed in
PT tissue of interest as compared to control tissue, for detecting cancer
PT cells in patient, comprises DNA microarray analysis or quantitative
PT polymerase chain reaction

PS Examples: Page 127: 127pp: English.

XX The invention relates to identifying tissue-specific polynucleotides (P)
CC that involves performing a genetic subtraction to identify pool of (P)
CC from tissue of interest (TI), performing DNA microarray analysis to
CC identify first subset of polynucleotides (SP1) at least 2-fold over
CC expressed in TI, and performing quantitative polymerase chain reaction
CC (PCR) analysis on SP1 to identify second subset of (P). The method is
CC useful for determining the presence or absence of a cancer cell in a
CC patient, monitoring the progression of cancer in a patient using a
CC biological sample such as blood, serum, lymph nodes, bone marrow, sputum,
CC urine or a tumour biopsy sample. The methods are useful for determining
CC the presence or absence of or monitoring progression of prostate, breast,
CC colon, ovarian, lung, head and neck, lymphoma, leukemia, liver,
CC gastric, kidney, bladder, pancreatic or endometrial cancer. The present
CC sequence represents the lipophilin B polypeptide.

XX Sequence 90 AA:

Query Match 100.0%; Score 450; DB 22; Length 90;
Best Local Similarity 100.0%; Pred. No. 9.2e-51;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAAVAKL 60
1 MKLSVCLLVTLALCCYQANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAAVAKL 60

QY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90
 DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90

RESULT 10

AAE07518
 ID AAE07518 standard; Protein: 90 AA.

AC AAE07518:

DT 06-NOV-2001 (first entry)

DE Human lipophilin B protein.

KW Human: lipophilin B; cytosolic; vaccine; gene therapy; uteroglobin;
 KM cancer; breast; ovary; prostate.

OS Homo sapiens.

PN W0200158947-A1.

XX 16-AUG-2001.

F- 08-FEB-2001: 2001WO-US04439.

PR 11-FEB-2000: 2000US-0183495.

PR 28-JUN-2000: 2000US-0215735.

PA (CORI-) CORIXA CORP.

PI Carter D, Veddick TS, Valliave-Douglass J, Houghton RL, Dillon DC;

DR WPI: 2001-497069/54.

DR N-PSDB: AAD13756.

PT Novel isolated complex two lipophilin-like polypeptides linked by at
 PT least one disulfide bond, used to treat or prevent breast, ovarian or
 PT prostate cancer -

XX Example 5; Page 72: 91pp; English.

CC The invention relates to a complex comprising a lipophilin-like
 CC polypeptide linked by at least one disulfide bond to a second
 CC lipophilin-like polypeptide. Lipophilin-like protein are members of
 CC uteroglobin superfamily. Lipophilin-like proteins are useful in the
 CC preparation of vaccines. The complex containing lipophilin-like
 CC proteins are useful for treating or preventing breast, ovarian or
 CC prostate cancer. The complex is also used for determining the
 CC presence or absence of cancer in a patient, or monitor the progress
 CC of cancer in a patient. Lipophilin DNA is also useful in gene therapy.
 CC The present sequence is human lipophilin B protein.

XX Sequence 90 AA:

Query Match 100.0%; Score 450; DB 22; Length 90;

Best Local Similarity 100.0%; Pred. No. 9.2e-51;

Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKISVCLLVTTALACCYQNAEFCPALVSELDFFISBPFLKSLAKDPAPPAVAARK 60

DB 1 MKISVCLLVTTALACCYQNAEFCPALVSELDFFISBPFLKSLAKDPAPPAVAARK 60

QY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90

DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90

RESULT 11

AAAB31681
 ID AAB31681 standard; Protein: 90 AA.

XX AAB31681;

XX 30-APR-2001 (first entry)

DE An endometrial specific steroid binding factor II.

KW Human: endometrial specific steroid binding factor; hESF; hESF1;
 KM hESF11; inflammation; asthma; rhinitis; cystic fibrosis; airway disease;
 KM neoplasia; atopy; phospholipase A2; polychlorinated biphenyl; chemotaxis;
 KM piagocytosis; platelet aggregation; eicosanoid; endometrial cell.

OS Homo sapiens.

FT Key Location/Qualifiers

FT Reptide 1..21

FT /note="signal peptide"

PN US6174992-B1.

PD 16-JAN-2001.

PF 08-MAR-1999: 99US-0263810.

PR 21-MAR-1996: 96US-0014724.

PR 21-MAR-1997: 97US-0821451.

PA (HUMA-) HUMAN GENOME SCI INC.

PI NI J, Yu G, Gentz R;

DR WPI: 2001-158477/16.

DR N-PSDB: AAF25213.

PT New human endometrial specific steroid binding factors, useful for
 PT treating and preventing inflammation, asthma, rhinitis, cystic
 PT fibrosis, airway disease, neoplasia and atopy -

XX Claim 1; Fig 2; 36pp; English.

CC The present sequence represents a human endometrial specific steroid
 CC binding factor (hESF). The specification describes hESF1, hESF11, and
 CC hESF1L, hESF1, II and III polypeptides, and polynucleotides encoding
 CC them are useful for treating and preventing inflammation, asthma,
 CC rhinitis, cystic fibrosis, airway disease, neoplasia and atopy,
 CC inhibiting phospholipase A2 activity, binding polychlorinated
 CC biphenyls, reducing foreign protein antigenicity, inhibiting monocyte
 CC and neutrophil chemotaxis and phagocytosis, inhibiting platelet
 CC aggregation, regulating eicosanoid levels in the human uterus, and for
 CC controlling the growth of endometrial cells. hESF polypeptides and
 CC nucleotides are also useful for research, biological, clinical or
 CC therapeutic purposes.

XX Sequence 90 AA:

Query Match 100.0%; Score 450; DB 22; Length 90;

Best Local Similarity 100.0%; Pred. No. 9.2e-51;

Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKISVCLLVTTALACCYQNAEFCPALVSELDFFISBPFLKSLAKDPAPPAVAARK 60

DB 1 MKISVCLLVTTALACCYQNAEFCPALVSELDFFISBPFLKSLAKDPAPPAVAARK 60

QY 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90

DB 61 GVKRCTDOMSLQKRSLLAEVLVKILKKCSV 90

RESULT 12

ABBU09634
 ID ABBU09634 standard; Protein: 90 AA.

XX ABBU09634;

DT 29-MAY-2002 (first entry)

XX Human endometrial specific steroid-binding factor (hesf) II.
 DE
 XX
 XX Human: endometrial specific steroid-binding factor: ESF;
 KW prostatic steroid-binding protein: hesf I; hesf II; hesf III; asthma.
 KW
 XX Homo sapiens.
 OS
 XX
 XX Key location/Qualifiers
 FH peptide 1..21
 FT /note- "signal peptide"
 FT Protein 22..90
 FT /note- "mature protein"
 XX
 XX USG38948-B1.
 PN
 XX 15-JAN-2002.
 PD
 XX 30-MAY-2000; 2000US-0583169.
 PE
 XX 21-MAR-1996; 96US-014724P.
 PR 21-MAR-1997; 97US-0821451.
 PR 08-MAR-1999; 99US-0263810.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA
 XX Ni J, Yu C, Gentz R;
 PI
 XX WPI: 2002-215019/27.
 DR N-PSDB: ABLA1782.
 XX
 XX New antibody specific for human endometrial specific steroid-binding
 PT factor (hesf) III, useful for detecting hesf III protein in biological
 PT sample and to isolate or identify clones expressing the protein
 XX
 XX Disclosure: Fig 1; 36pp; English.
 PS
 XX
 XX The present sequence represents an endometrial specific steroid-binding
 CC factor (hesf) II. The full length protein has a molecular weight of
 CC 9.9 kDa. The protein has homology to rat prostatic steroid-binding
 CC protein C2. Antibodies which bind hesf proteins, such as hesf I, hesf II,
 CC and hesf III are useful for isolating or to identify clones expressing
 CC the polypeptides or to purify the polypeptides by affinity
 CC chromatography. Agonists and antagonists of hesf proteins are useful
 CC for treating and/or preventing susceptibility to asthma.
 CC
 * Sequence 90 AA:
 Query Match 100.0%; Score 450; DB 23; Length 90;
 Best Local Similarity 100.0%; Pred. No. 9.2e-51;
 Matches 90; Conservative 0; Mismatches 0; Indels 0; Caps 0;
 QY 1 MKLSVCLLVLTALCYQVAAEFPCPALVSELDFFITSEPLFKSLAKFPAPPAVAKL 60
 Db 1 MKLSVCLLVLTALCYQVAAEFPCPALVSELDFFITSEPLFKSLAKFPAPPAVAKL 60
 QY 61 GVKRCTQMSLQKRSLLAEVLVRLKKCSV 90
 Db 61 GVKRCTQMSLQKRSLLAEVLVRLKKCSV 90
 RESULT 13
 ABB11907
 ID ABB11907 standard: peptide; 117 AA.
 AC ABB11907;
 XX
 XX 11-JAN-2002 (first entry)
 DE Human breast tumour-associated protein homologue. SEQ ID NO:2277.
 XX
 XX Human: cytokine; cell proliferation; cell differentiation; growth factor;
 KW haematopoiesis regulation; tissue growth; immunomodulator; activin;

KW inhibin; chemotaxis; chemokinesis; thrombolysis; oncogenesis;
 KW proliferation; metastasis; cancer; tumour; haematopoietic disorder;
 KW myeloid cell disorder; lymphoid cell disorder; asthma; arthritis;
 KW chronic inflammatory condition; proliferative retinopathy;
 KW atherosclerosis; coronary heart disease; arterial ischaemia;
 KW bone disorder; osteoporosis; vascular growth disorder;
 KW tissue regeneration; wound healing; infection; immune disorder;
 KW cell culture; drug screening; gene therapy; antiinflammatory;
 KW antiasthmatic; antiarthritis; haemostatic; antiarteriosclerotic;
 KW cyostatic; osteopathic; vasotropic; cardiant; virucide; antibacterial;
 KW antifungal; vulnery; antitumor.
 XX
 XX Homo sapiens.
 OS
 XX
 XX MO200157188-A2.
 PN
 XX 09-AUG-2001.
 PD
 XX 05-FEB-2001; 2001WO-US03800.
 PE
 XX 03-FEB-2000; 2000US-0496914.
 PR 27-APR-2000; 2000US-0560875.
 XX
 XX (HYSE-) HYSEQ INC.
 PA
 XX Tang YT, Liu C, Drmanac RT;
 PI
 XX WPI: 2001-457740/49.
 DR N-PSDB: ABA09151.
 XX
 XX Human proteins and DNA encoding sequences useful for preventing,
 PT treating or ameliorating a medical condition in a mammalian subject
 PT e.g. arthritis and cancer
 XX
 XX Claim 20; Page 275; 1963pp; English.
 XX
 XX Sequences ABB10981-ABB12330 represent 1350 novel human polypeptides, and
 CC sequences ABA08225-ABA09374 represent nucleic acids encoding them. The
 CC invention also relates to vectors and recombinant host cells comprising a
 CC nucleotide of the invention, methods of producing the novel polypeptides,
 CC antibodies against the polypeptides, methods of detecting the nucleotides
 CC or polypeptides in a sample, and methods of identifying compounds which
 CC bind to polypeptides of the invention. Although novel, many of the
 CC polypeptides of the invention have homology to known proteins, thereby
 CC giving an insight into their probable biological activities, and hence
 CC potential therapeutic applications. The polypeptides of the invention may
 CC have various activities, including cytokine, cell proliferation or cell
 CC differentiation activities; stem cell growth factor activity;
 CC haematopoiesis regulatory activity; tissue growth activity;
 CC immunomodulatory activity; activin- or inhibin-related activities;
 CC chemotactic or chemokinetic activities; haemostatic, thrombotic or
 CC thrombolytic activities; receptor or ligand activities; or may be
 CC involved in oncogenesis, cancer cell proliferation or metastasis.
 CC Depending on their biological activities, polypeptides and nucleotides of
 CC the invention are useful for preventing, treating or ameliorating medical
 CC conditions, e.g., by protein or gene therapy. Such conditions include
 CC cancers, haematopoietic disorders (e.g., myeloid or lymphoid cell
 CC disorders), chronic inflammatory conditions (e.g., asthma or arthritis),
 CC proliferative retinopathy, atherosclerosis, coronary heart disease,
 CC arterial ischaemia, bone disorders (e.g., osteoporosis), and abnormal
 CC vascular growth. Polypeptides involved with tissue regeneration and
 CC repair (or nucleic acids encoding them) may be used to promote wound
 CC healing (e.g., of burns, incisions and ulcers), while chds with
 CC immunomodulatory activities may be used in the treatment of viral,
 CC bacterial and fungal infections in addition to immune disorders.
 CC Polypeptides with growth factor activity may be used in cell cultures to
 CC promote cell growth. For example, such polypeptides may be used to
 CC manipulate stem cells in culture to give rise to neuroepithelial cells
 CC that can be used to augment or replace cells damaged by illness,
 CC autoimmune disease or accidental damage. The polypeptides and nucleotides
 CC may also be used in the diagnosis of the above conditions, and in drug
 CC screening techniques. The present sequence represents a novel human
 CC polypeptide of the invention.

```

XX Sequence 117 AA:
SQ
Query Match
Best Local Similarity 100.0%; Score 450; DB 22: Length 117;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCGYANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
DB 28 MKLSVCLLVTLALCCGYANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 87
DB 88 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 117

RESULT 14
AA048606
ID AA048606 standard; Protein: 120 AA.
AC
AA048606;
XX
XX 08-DEC-1999 (first entry)

L Human breast tumour-associated protein 67.
XX Expressed sequence tag; EST; human; breast; cancer; gene therapy;
KW treatment; tumour; cytostatic; medication.
XX Homo sapiens.
OS
XX DE19813839-A1.
XX 23-SEP-1999.
XX PE 20-MAR-1998; 98DE-1013839.
XX PR 20-MAR-1998; 98DE-1013839.
XX (META-) METAGEN GES GENOMFORSCHUNG MBH.
XX Specht T, Hinzmann B, Schmitt A, Pilarsky C, Dahl E, Rosenthal A:
XX WPI: 1999-528981/45.
XX DR N-PSDB; AA233666.
XX Human nucleic acid sequences and protein products from tumor breast
XX tissue; useful for breast cancer therapy.
XX Claim 22: 172; 188bp; German.
XX
C This invention describes novel human nucleic acid sequences from tumor
C breast tissue which have cytostatic activity. The nucleic acid sequences
C can be used to produce and isolate full-length gene sequences. They can
C be used to express proteins, which can be used as tools to find an
C actively against breast cancer. The sequences can be used in sense or
C antisense form. They are especially useful for medicaments for gene
C therapy to treat breast cancer. AA048540-048547 represent protein
C fragments encoded by the expressed sequence tags described in the method
C of the invention.
XX
XX Sequence 120 AA:
Query Match
Best Local Similarity 100.0%; Score 450; DB 20: Length 120;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCGYANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
DB 31 MKLSVCLLVTLALCCGYANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 90
OY 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

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DB 91 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 120

RESULT 15
AAE07521
ID AAE07521 standard; Protein: 90 AA.
XX
XX AAE07521;
XX
XX 06-NOV-2001 (first entry)
XX
DE Human lipophilin B S11 3 3 protein.
XX
KW Human; lipophilin B S11 3 3; cytostatic; vaccine; gene therapy;
KW uteroglobin; cancer; breast; ovary; prostate.
XX
XX Homo sapiens.
XX OS
XX W0200158947-A1.
XX PN 16-AUG-2001.
XX
XX 08-FEB-2001; 2001WO-US04439.
XX
XX 11-FEB-2000; 2000US-0183495.
XX PR 28-JUN-2000; 2000US-0215735.
XX
PA (CORI-) CORIXA CORP.
XX
PL Carter D, Vedvick TS, Vallieve-Douglas J, Houghton KL, Dillon DC:
XX WPI: 2001-497069/54.
XX DR N-PSDB; AAD13761.
XX
XX Novel isolated complex two lipophilin-like polypeptides linked by at
XX least one disulfide bond, used to treat or prevent breast, ovarian or
XX prostate cancer.
XX
XX Example 5: Page 82; 91pp; English.
XX
C The invention relates to a complex comprising a lipophilin-like
C polypeptide linked by at least one disulfide bond to a second
C lipophilin-like polypeptide. Lipophilin-like protein are members of
C uteroglobin superfamily. Lipophilin-like proteins are useful in the
C preparation of vaccines. The complex containing lipophilin-like
C proteins are useful for treating or preventing breast, ovarian or
C prostate cancer. The complex is also used for determining the
C presence or absence of cancer in a patient, or monitor the progress
C of cancer in a patient. Lipophilin DNA is also useful in gene therapy.
C The present sequence is human lipophilin B S11 3 3 protein.
XX
XX Sequence 90 AA:
Query Match
Best Local Similarity 99.3%; Score 447; DB 22: Length 90;
Matches 89; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLSVCLLVTLALCCGYANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
DB 1 MKLSVCLLVTLALCCGYANAEFCPALVSELDFFFISEPLFKLSLAKFDAPPEAVAAKL 60
OY 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
DB 61 GVKRCTDQMSLQKRSLLAEVLVKILKCSV 90
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Search completed: April 24, 2003, 16:18:58
Job time : 31.4918 secs

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GenCore version 5.1.4-p5.4578
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OM protein - protein search, using sw model

Run on: April 24, 2003, 16:19:02 ; Search time 14.7377 Seconds
(without alignments)
505.647 Million cell updates/sec

Title: US-09-975-502a-5
Perfect score: 475
Sequence: 1 MKLMLVLMALSLQHCYAGS.....LSNVEFMQLIVDSICDLUF 93

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 301932 seqs, 80129803 residues

Total number of hits satisfying chosen parameters: 301932

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications-AA:
1: /cgn2_6/ptodata/1/pubppaa/US08_NEW_PUB_PEP.*
2: /cgn2_6/ptodata/1/pubppaa/PCT_NEW_PUB_PEP.*
3: /cgn2_6/ptodata/1/pubppaa/US06_NEW_PUB_PEP.*
4: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB_PEP.*
5: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB_PEP.*
6: /cgn2_6/ptodata/1/pubppaa/PCTUS_PUBCOMB_PEP.*
7: /cgn2_6/ptodata/1/pubppaa/US08_PUBCOMB_PEP.*
8: /cgn2_6/ptodata/1/pubppaa/US09_PUBCOMB_PEP.*
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12: /cgn2_6/ptodata/1/pubppaa/US10_PUBCOMB_PEP.*
13: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB_PEP.*
14: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB_PEP.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	475	100.0	93	US-10-076-622-503	Sequence 503, App
2	475	100.0	93	US-09-975-502a-5	Sequence 5, Appl
3	475	100.0	93	US-10-042-945-27	Sequence 27, Appl
4	475	100.0	93	US-09-905-673-1	Sequence 1, Appl
5	475	100.0	93	US-09-905-673-34	Sequence 34, Appl
6	475	100.0	93	US-09-757-417-27	Sequence 27, Appl
7	475	100.0	93	US-09-934-054-3	Sequence 3, Appl
8	475	100.0	93	US-09-934-054-10	Sequence 10, Appl
9	475	100.0	93	US-10-007-805-503	Sequence 503, App
10	475	100.0	101	US-10-042-945-58	Sequence 58, Appl
11	475	100.0	102	US-10-042-945-59	Sequence 59, Appl
12	475	100.0	132	US-10-042-945-47	Sequence 47, Appl
13	475	100.0	132	US-09-757-417-47	Sequence 47, Appl
14	475	100.0	182	US-09-905-673-60	Sequence 60, Appl
15	475	100.0	410	US-10-076-622-495	Sequence 495, App
16	475	100.0	410	US-10-007-805-495	Sequence 495, App
17	475	100.0	477	US-09-905-673-67	Sequence 67, Appl
18	475	100.0	743	US-10-076-622-494	Sequence 494, App
19	475	100.0	743	US-10-007-805-494	Sequence 494, App

20	475	100.0	1095	US-10-076-622-493	Sequence 493, App
21	475	100.0	1095	US-10-007-805-493	Sequence 493, App
22	475	99.8	93	US-09-905-673-30	Sequence 30, Appl
23	471	99.2	93	US-09-905-673-51	Sequence 51, Appl
24	471	99.2	93	US-09-905-673-52	Sequence 52, Appl
25	471	99.2	93	US-09-905-673-53	Sequence 53, Appl
26	471	99.2	182	US-09-905-673-61	Sequence 61, Appl
27	468	98.5	93	US-09-905-673-29	Sequence 29, Appl
28	466	98.1	93	US-09-905-673-31	Sequence 31, Appl
29	463	97.5	93	US-09-905-673-32	Sequence 32, Appl
30	463	97.5	93	US-09-905-673-33	Sequence 33, Appl
31	448.5	94.4	90	US-09-905-673-28	Sequence 28, Appl
32	448.5	94.4	90	US-09-905-673-54	Sequence 54, Appl
33	414	87.2	80	US-10-042-945-57	Sequence 57, Appl
34	414	87.2	95	US-10-042-945-56	Sequence 56, Appl
35	399	84.0	145	US-09-905-673-63	Sequence 63, Appl
36	386	81.3	75	US-09-110-716-41	Sequence 41, Appl
37	386	81.3	76	US-10-042-945-60	Sequence 60, Appl
38	386	81.3	145	US-09-905-673-62	Sequence 62, Appl
39	386	81.3	460	US-09-905-673-66	Sequence 66, Appl
40	281	59.2	95	US-09-110-716-31	Sequence 31, Appl
41	281	59.2	95	US-09-985-911-6	Sequence 6, Appl
42	272	57.3	93	US-10-227-884-58	Sequence 58, Appl
43	272	57.3	93	US-10-230-163-58	Sequence 58, Appl
44	272	57.3	93	US-10-218-631-58	Sequence 58, Appl
45	272	57.3	93	US-10-230-338-58	Sequence 58, Appl

ALIGNMENTS

RESULT 1
US-10-076-622-503
Sequence 503, Application US/10076622
Publication No. US20030023036A1
GENERAL INFORMATION:
APPLICANT: Houghton, Raymond L.
APPLICANT: Sleasch, David H.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
FILE REFERENCE: 210121.470C11
CURRENT APPLICATION NUMBER: US/10/076,622
CURRENT FILING DATE: 2002-02-13
NUMBER OF SEQ ID NOS: 627
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 503
LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
US-10-076-622-503

Query Match 100.0% Score 475; DB 9; Length 93;
Best Local Similarity 100.0%; Pred No. 6.2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLMLVLMALSLQHCYAGSCPLENVIKTTINPOVSKTEYKELIQEFTDNNATNAID 60
DB 1 MKLMLVLMALSLQHCYAGSCPLENVIKTTINPOVSKTEYKELIQEFTDNNATNAID 60
QY 61 ELKECFINQTDITLSNVEFMQLIVDSICDLUF 93
DB 61 ELKECFINQTDITLSNVEFMQLIVDSICDLUF 93

RESULT 2
US-09-975-502a-5
Sequence 5, Application US/09975502A
Publication No. US20030044859A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Henslee, Jerry G.
APPLICANT: Friedman, Paula N.

;; TITLE OF INVENTION: REAGENTS AND METHODS USEFUL FOR
;; FILE REFERENCE: 5972.US.P7
;; CURRENT APPLICATION NUMBER: US/09/975.502A
;; PRIOR FILING DATE: 2002-06-10
;; PRIOR APPLICATION NUMBER: US 09/467,602
;; PRIOR FILING DATE: 1999-12-20
;; PRIOR APPLICATION NUMBER: US 09/215,818
;; PRIOR FILING DATE: 1998-12-18
;; PRIOR APPLICATION NUMBER: US 08/912,276
;; PRIOR FILING DATE: 1997-08-15
;; PRIOR APPLICATION NUMBER: US 08/697,105
;; PRIOR FILING DATE: 1996-08-19
;; PRIOR APPLICATION NUMBER: US 08/912,149
;; PRIOR FILING DATE: 1997-08-15
;; PRIOR APPLICATION NUMBER: US 08/697,106
;; PRIOR FILING DATE: 1996-08-19
;; NUMBER OF SEQ ID NOS: 8
;; SOFTWARE: FASTSEQ for Windows Version 4.0
;; SEQ ID NO 5
;; LENGTH: 93
;; TYPE: PRT
;; ORGANISM: Homo sapiens
-09-975-502A-5

Query Match 100.0%; Score 475; DB 9; Length 93;
Best Local Similarity 100.0%; Pred. No. 6.2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60
DB 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60

QY 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93
DB 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93

RESULT 3
US-10-042-945-27
; Sequence 27, Application US/10042945
; Publication No. US20030045468A1
; GENERAL INFORMATION:
; APPLICANT: Filing, Steven P.
; APPLICANT: Foy, Teresa M.
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Wang, Aljun
; APPLICANT: Johnson, Jeffrey C.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Sutherland, R. Alec
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY,
; TITLE OF INVENTION: DIAGNOSIS AND MONITORING OF BREAST CANCER
; FILE REFERENCE: 210121.479C3
; CURRENT APPLICATION NUMBER: US/10/042,945
; CURRENT FILING DATE: 2002-01-08
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 27
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-042-945-27

Query Match 100.0%; Score 475; DB 9; Length 93;
Best Local Similarity 100.0%; Pred. No. 6.2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60
DB 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60

QY 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93
DB 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93

DB 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93

RESULT 4
US-09-905-673-1
; Sequence 1, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-905-673-1

Query Match 100.0%; Score 475; DB 9; Length 93;
Best Local Similarity 100.0%; Pred. No. 6.2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60
DB 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60

QY 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93
DB 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93

RESULT 5
US-09-905-673-34
; Sequence 34, Application US/09905673
; Publication No. US20030059432A1
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
; FILE REFERENCE: 210121.498C1
; CURRENT APPLICATION NUMBER: US/09/905,673
; CURRENT FILING DATE: 2001-07-13
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 34
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-673-34

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Best Local Similarity 100.0%; Pred. No. 6.2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60
DB 1 MKLWVLMALALSGHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFIDNATTNAID 60

QY 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93
DB 61 ELKECFLNQTDFTLSNVEVFMOIYDSSICDLF 93

RESULT 6
US-09-757-417-27
; Sequence 27, Application US/09757417
; Patent No. US20020082216A1

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QY 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93
      |||
DB 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93

RESULT 9
US-10-007-805-503
: Sequence 503, Application US/10007805
: Patent No. US20020150581A1
: GENERAL INFORMATION:
: APPLICANT: Jiang, Yugu
: APPLICANT: Dillon, Devin C.
: APPLICANT: Mitcham, Jennifer L.
: APPLICANT: Xu, Jiangchun
: APPLICANT: Harlocker, Susan L.
: APPLICANT: Hepler, William T.
: APPLICANT: Henderson, Robert A.
: APPLICANT: Fanger, Gary R.
: APPLICANT: Vedvick, Thomas S.
: APPLICANT: McNeill, Patricia D.
: APPLICANT: Durham, Margareta
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
: TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
: FILE REFERENCE: 210121.470C10
: CURRENT APPLICATION NUMBER: US/10/007.805
: CURRENT FILING DATE: 2001-12-07
: NUMBER OF SEQ ID NOS: 593
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 503
: LENGTH: 93
: TYPE: PRT
: ORGANISM: Homo sapiens
US-10-007-805-503

Query Match 100.0%; Score 475; DB 12; Length 93;
Best Local Similarity 100.0%; Pred. No. 6,2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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      |||
DB 1 KKLWLVLMIALSQHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFDIDNATTNAID 60

QY 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93
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DB 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93

RESULT 10
US-10-042-945-58
: Sequence 58, Application US/10042945
: Publication No. US20030045468A1
: GENERAL INFORMATION:
: APPLICANT: Fling, Steven P.
: APPLICANT: Foy, Teresa M.
: APPLICANT: Clapper, Jonathan D.
: APPLICANT: Wang, Aljun
: APPLICANT: Johnson, Jeffrey C.
: APPLICANT: McNeill, Patricia D.
: APPLICANT: Sutherland, R. Alec
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY,
: TITLE OF INVENTION: DIAGNOSIS AND MONITORING OF BREAST CANCER
: FILE REFERENCE: 210121.479C3
: CURRENT APPLICATION NUMBER: US/10/042.945
: CURRENT FILING DATE: 2002-01-08
: NUMBER OF SEQ ID NOS: 69
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 58
: LENGTH: 101
: TYPE: PRT
: ORGANISM: Homo sapiens
US-10-042-945-58

Query Match 100.0%; Score 475; DB 9; Length 101;
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Best Local Similarity 100.0%; Pred. No. 6,9e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 KKLWLVLMIALSQHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFDIDNATTNAID 60

QY 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93
      |||
DB 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93

RESULT 11
US-10-042-945-59
: Sequence 59, Application US/10042945
: Publication No. US20030045468A1
: GENERAL INFORMATION:
: APPLICANT: Fling, Steven P.
: APPLICANT: Foy, Teresa M.
: APPLICANT: Clapper, Jonathan D.
: APPLICANT: Wang, Aljun
: APPLICANT: Johnson, Jeffrey C.
: APPLICANT: McNeill, Patricia D.
: APPLICANT: Sutherland, R. Alec
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY,
: TITLE OF INVENTION: DIAGNOSIS AND MONITORING OF BREAST CANCER
: FILE REFERENCE: 210121.479C3
: CURRENT APPLICATION NUMBER: US/10/042.945
: CURRENT FILING DATE: 2002-01-08
: NUMBER OF SEQ ID NOS: 69
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 59
: LENGTH: 102
: TYPE: PRT
: ORGANISM: Homo sapiens
US-10-042-945-59

Query Match 100.0%; Score 475; DB 9; Length 102;
Best Local Similarity 100.0%; Pred. No. 6,9e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KKLWLVLMIALSQHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFDIDNATTNAID 60
      |||
DB 1 KKLWLVLMIALSQHCYAGSCGPLLENVSKTINPOVSKTEYKELLOEFDIDNATTNAID 60

QY 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93
      |||
DB 61 ELKECFLNQDFTLSNVEVFMOIYDSSICDLF 93

RESULT 12
US-10-042-945-47
: Sequence 47, Application US/10042945
: Publication No. US20030045468A1
: GENERAL INFORMATION:
: APPLICANT: Fling, Steven P.
: APPLICANT: Foy, Teresa M.
: APPLICANT: Clapper, Jonathan D.
: APPLICANT: Wang, Aljun
: APPLICANT: Johnson, Jeffrey C.
: APPLICANT: McNeill, Patricia D.
: APPLICANT: Sutherland, R. Alec
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY,
: TITLE OF INVENTION: DIAGNOSIS AND MONITORING OF BREAST CANCER
: FILE REFERENCE: 210121.479C3
: CURRENT APPLICATION NUMBER: US/10/042.945
: CURRENT FILING DATE: 2002-01-08
: NUMBER OF SEQ ID NOS: 69
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 47
: LENGTH: 132
: TYPE: PRT
: ORGANISM: Homo sapiens
```

```

: GENERAL INFORMATION:
: APPLICANT: Fanger, Gary R.
: APPLICANT: Foy, Theresa M.
: APPLICANT: Houghton, Raymond L.
: APPLICANT: Reed, Steven G.
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
: TITLE OF INVENTION: THERAPY, DIAGNOSIS AND MONITORING OF BREAST CANCER
: FILE REFERENCE: 210121.479C1
: CURRENT APPLICATION NUMBER: US/09/757,417
: NUMBER OF SEQ ID NOS: 49
: SOFTWARE: FASTSEQ for Windows Version 4.0
: SEQ ID NO: 27
: LENGTH: 93
: TYPE: PRT
: ORGANISM: Homo sapien
: 5-09-757-417-27

Query Match          100.0%; Score 475; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 6,2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 M K L M V L M L A L S Q H C Y A G S G C P L E N V I S K T I N P O V S K T E Y K E L L O E F I D N A T T N A I D 60
Db 1 M K L M V L M L A L S Q H C Y A G S G C P L E N V I S K T I N P O V S K T E Y K E L L O E F I D N A T T N A I D 60

Qy 61 E L K E C F L N Q T D E T L S N V E F M Q L I Y D S S L C D L F 93
Db 61 E L K E C F L N Q T D E T L S N V E F M Q L I Y D S S L C D L F 93

RESULT 7
US-09-934-054-3
: Sequence 3, Application US/09934054
: Patent No. US20020107385A1
: GENERAL INFORMATION:
: APPLICANT: Akerblom, Ingrid E.
: Hillman, Jennifer L.
: Murry, Lynn E.
: Goli, Surya K.
: Hawkins, Phillip R.
: TITLE OF INVENTION: BREAST TUMOR SPECIFIC PROTEINS
: NUMBER OF SEQUENCES: 13
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Fish & Richardson P.C.
: STREET: 2200 Sand Hill Road, Suite 100
: CITY: Menlo Park
: STATE: CA
: COUNTRY: USA
: ZIP: 94025-6936
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: IBM PC compatible
: SOFTWARE: Patentin Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/934,054
: FILING DATE: 21-Aug-2001
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US/08/747,547
: FILING DATE: <Unknown>
: ATTORNEY/AGENT INFORMATION:
: NAME: Billings, Lucy J.
: REGISTRATION NUMBER: 36,749
: REFERENCE/DOCKET NUMBER: PF-0077 US
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (650) 855-0555
: TELEFAX: (650) 845-4166
: INFORMATION FOR SEQ ID NO: 3:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 93 amino acids
: TYPE: amino acid
: STRANDEDNESS: double

```

```

: TOPOLOGY: linear
: MOLECULE TYPE: <Unknown>
: SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-934-054-3

Query Match          100.0%; Score 475; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 6,2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 M K L M V L M L A L S Q H C Y A G S G C P L E N V I S K T I N P O V S K T E Y K E L L O E F I D N A T T N A I D 60
Db 1 M K L M V L M L A L S Q H C Y A G S G C P L E N V I S K T I N P O V S K T E Y K E L L O E F I D N A T T N A I D 60

Qy 61 E L K E C F L N Q T D E T L S N V E F M Q L I Y D S S L C D L F 93
Db 61 E L K E C F L N Q T D E T L S N V E F M Q L I Y D S S L C D L F 93

RESULT 8
US-09-934-054-10
: Sequence 10, Application US/09934054
: Patent No. US20020107385A1
: GENERAL INFORMATION:
: APPLICANT: Akerblom, Ingrid E.
: Hillman, Jennifer L.
: Murry, Lynn E.
: Goli, Surya K.
: Hawkins, Phillip R.
: TITLE OF INVENTION: BREAST TUMOR SPECIFIC PROTEINS
: NUMBER OF SEQUENCES: 13
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Fish & Richardson P.C.
: STREET: 2200 Sand Hill Road, Suite 100
: CITY: Menlo Park
: STATE: CA
: COUNTRY: USA
: ZIP: 94025-6936
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: IBM PC compatible
: SOFTWARE: Patentin Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/934,054
: FILING DATE: 21-Aug-2001
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US/08/747,547
: FILING DATE: <Unknown>
: ATTORNEY/AGENT INFORMATION:
: NAME: Billings, Lucy J.
: REGISTRATION NUMBER: 36,749
: REFERENCE/DOCKET NUMBER: PF-0077 US
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (650) 855-0555
: TELEFAX: (650) 845-4166
: INFORMATION FOR SEQ ID NO: 10:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 93 amino acids
: TYPE: amino acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: <Unknown>
: SEQUENCE DESCRIPTION: SEQ ID NO: 10:
US-09-934-054-10

Query Match          100.0%; Score 475; DB 10; Length 93;
Best Local Similarity 100.0%; Pred. No. 6,2e-44;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 M K L M V L M L A L S Q H C Y A G S G C P L E N V I S K T I N P O V S K T E Y K E L L O E F I D N A T T N A I D 60
Db 1 M K L M V L M L A L S Q H C Y A G S G C P L E N V I S K T I N P O V S K T E Y K E L L O E F I D N A T T N A I D 60

```

US-10-042-945-47

Query Match	100.0%;	Score 475;	DB 9;	Length 132;
Best Local Similarity	100.0%;	Pred. No. 9.5e-44;		
Matches 93;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

```
Oy      1 MRLVLMALISQHCYAGSGCPLEENVISKITNPQSKTEKELLQEFDIDNATTAID   60  
         |||||  
Db     40 MKLIVMLAALSQHCYAGSGCPLEENVISKITNPQSKTEKELLQEFDIDNATTAID   99
```

```
OY      61 E.KECFLNQTDETL$NVEVFQMLIYDSSLCDLF 93  
        |||||  
DB     100 EKKECFLNQTDETLSNVEVFQMLIYDSSLCDLF 132
```

RESULT 13
2-09-757

```

Sequence 47, Application US/09757417
Patent No. US2002008216A1
GENERAL INFORMATION:
APPLICANT: Fanger, Gary R.
APPLICANT: Foy, Theresa M.
APPLICANT: Houghton, Raymond L.
APPLICANT: Reed, Steven G.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITILE OF INVENTION: THERAPY, DIAGNOSIS AND MONITORING OF BREAST CANCER
FILE REFERENCE: 210121.479C1
CURRENT APPLICATION NUMBER: US/09/757,417
CURRENT FILING DATE: 2001-01-08
NUMBER OF SEQ ID NOS: 49
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 47
LENGTH: 132
TYPE: PRF
ORGANISM: Homo sapiens
US-09-757-417-47

```

Query Match	100.0%	Score 475;	DB 10;	Length 132;
Best Local Similarity	100.0%	Pred. No. 9.5e-44;		
Matches 93; Conservative	0;	Mismatches 0;	Indels 0;	Gaps 0

```
QY      1 MRLMVLMLAALSQHCHYAGSGCPLEENVISKINPVSKTEYEKLLQEFLIDNATTAID 6G
         |||||||
Db     40 MKLMLVLMALAASQHCHYAGSGCPLEENVISKINPVSKTEYEKELQEFLIDNATTNAID 99
```

2y 61 ELKECF.LNQDTEL.SNVEVF.MQLIYDSS.LCDLF 93
 100 ELKECF.LNQDTEL.SNVEVF.MQLIYDSS.LCDLF 133

RESULT 14

```

1 Sequence 60, Application US/09905673
2 Publication No. US20030059432a1
3
4 GENERAL INFORMATION:
5
6 APPLICANT: Dillion, David C.
7 APPLICANT: Fanger, Gary R.
8 TITLE OF INVENTION: LIPOPOLIMIN COMPLEXES FOR USE IN CANCER
9 TITLE OF INVENTION: DIAGNOSIS AND THERAPY
10 FILE REFERENCE: 210121.498C1
11 CURRENT APPLICATION NUMBER: US/09/905,673
12 CURRENT FILING DATE: 2001-07-13
13 NUMBER OF SEQ ID NOS: 67
14 SOFTWARE: FASTSED FOR WINDOWS Version 3.0
15 SEQ ID NO 60
16 LENGTH: 182
17 TYPE: prt
18
19 ORGANISM: Homo sapiens
20 US-09-905-673-60

```

Query Match	100.0%;	Score 475;	DB 9;	Length 182;
Best local Similarity	100.0%;	Pred. No. 1.4e-43;		
Matches 93;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

Oy	1	MKLMLVLMIAALSOHCQYASGCGPLLENNISKTIINQVSKEYEKELAQEFIDONATNNAID	60
Dd	1	MKLLMVLMIAALSOHCQYASGCGPLLENNISKTIINQVSKEYEKELAQEFIDONATNNAID	60
Oy	61	ELKEKCFLNQTDFTLSNVVEFMOLITDSSLCOLF	93
Dd	61	ELKEKCFEUNQTDFTLSNVVEFMOLITDSSLCOLF	93

Qy 61 ELKECFLNQTDFTLSNVEVEMQLIYDSSLCDIF 93
 |||||
 Db 61 ELKECFLNQTDFTLSNVEVEMQLIYDSSLCDIF 93

RESULT 15
US-10-076

```

US-10-076-622-495
? Sequence 495, Application US/10076622
? Publication No. US00030023036A1
? GENERAL INFORMATION:
?
? APPLICANT: Houghton, Raymond L.
?
? APPLICANT: Pestig, David H.
?
? TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
? OF INFECTIONS OF THE BREAST
?
? FILE REFERENCE: 210121.470C11
?
? CURRENT APPLICATION NUMBER: US/10/076,622
?
? CURRENT FILING DATE: 2002-02-13
?
? NUMBER OF SEQ ID NOS: 627
?
? SOFTWARE: FastSeq for Windows Version 4.0
?
? SEQ ID NO 495
?
? LENGTH: 410
?
? TYPE: PRT
?
? ORGANISM: Homo sapiens
?
US-10-076-622-495

```

```
Query Match      100.0%; Score 475; DB 9; length 410;
Best Local Similarity 100.0%; Pred. No. 3.8e-43;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

[illegible][illegible]

Search completed: April. 24, 2003, 16:21:56
Job time : 15.7377 secs

RE 3
 ✓ US-09-905-673-35
 ; Sequence 35, Application US/09905673
 ; Publication No. US20030059432A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dillon, Davin C.
 ; APPLICANT: Fanger, Gary R.
 ; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
 ; TITLE OF INVENTION: DIAGNOSIS AND THERAPY
 ; FILE REFERENCE: 210121.498C1
 ; CURRENT APPLICATION NUMBER: US/09/905,673
 ; CURRENT FILING DATE: 2001-07-13
 ; NUMBER OF SEQ ID NOS: 67
 ; SOFTWARE: FastSEQ for Windows Version 3.0
 ; SEQ ID NO 35
 ; LENGTH: 90
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-905-673-35

BUI 01
 SEQ ID#6

Query Match 100.0%; Score 450; DB 9; Length 90;
 Best Local Similarity 100.0%; Pred. No. 2.2e-45;
 Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKLSVCLLLVTLALCCYQANAFCPALVSELLDFFIFISEPLFKLSLAKFDAPPEAVA AKL 60
 |||
 Db 1 MKLSVCLLLVTLALCCYQANAFCPALVSELLDFFIFISEPLFKLSLAKFDAPPEAVA AKL 60
 |||
 Qy 61 GVKRCTDQMSLQKRSLIAEVLVKKKCSV 90
 |||
 Db 61 GVKRCTDQMSLQKRSLIAEVLVKKKCSV 90

RESULT 4
 US-09-825-301-77
 ; Sequence 77, Application US/09825301

RESULT 4
 ✓ US-09-905-673-1
 ; Sequence 1, Application US/09905673
 ; Publication No. US20030059432A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dillon, Davin C.
 ; APPLICANT: Fanger, Gary R.
 ; TITLE OF INVENTION: LIPOPHILIN COMPLEXES FOR USE IN CANCER
 ; TITLE OF INVENTION: DIAGNOSIS AND THERAPY
 ; FILE REFERENCE: 210121.498C1
 ; CURRENT APPLICATION NUMBER: US/09/905,673
 ; CURRENT FILING DATE: 2001-07-13
 ; NUMBER OF SEQ ID NOS: 67
 ; SOFTWARE: FastSEQ for Windows Version 3.0
 ; SEQ ID NO 1
 ; LENGTH: 93
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-09-905-673-1

mammaglobin
 SEQ ID#5

Query Match 100.0%; Score 475; DB 9; Length 93;
 Best Local Similarity 100.0%; Pred. No. 6.2e-44;
 Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKLLMVLMLAALSQHCYAGSGCPLENVISKTNPQVSKTEYKELLQEFIDDNATTNAID 60
 |||
 Db 1 MKLLMVLMLAALSQHCYAGSGCPLENVISKTNPQVSKTEYKELLQEFIDDNATTNAID 60
 |||
 Qy 61 ELKECFNLQTDETLSNVEVFMQLIYDSSLCDLF 93
 |||
 Db 61 ELKECFNLQTDETLSNVEVFMQLIYDSSLCDLF 93

Sequence alignment between Applicants' SEQ ID #6 & 5 and US20030059432 A1,
 respectively

Mammaglobin (SEQ ID#5)

RESULT 2
AAM59777 standard; Protein; 93 AA.

ID AAM59777 standard; Protein; 93 AA.
AC AAM59777;
XX 12-OCT-1998 (first entry)
XX

DE Amino acid sequence of the human steroid binding protein C2.
XX
XX Human steroid-binding protein C2; hSBP2; hSBP1; breast cancer; probe;
KW gene therapy vector; ribozyme; probe; hybridisation; amplification;
KW antibody; immunoassay.
XX

OS Homo sapiens.
XX
XX WO9821331-A1.
PN
XX 22-MAY-1998.
PD
XX 07-NOV-1997; 97WO-US20674.
PE
XX 12-NOV-1996; 96US-0747547.
PR
XX (INCYTE) INCYTE PHARM INC.
PA
XX

PI Akerblom IE, Goli SK, Hawkins PR, Hillman JL, Murry LE;
XX
XX WPI: 1998-297935/26.
DR N-PSDB; AAV41580.
XX
XX New human steroid binding proteins C1 and C2 - useful for, e.g.
PT diagnosis, monitoring and treating breast cancer, and for drug
PT screening
XX
XX Claim 12; Fig 2; 70pp; English.
PS
XX

CC This is the amino acid sequence of the human steroid-binding protein
CC C2 (hSBP2) used in the method of the invention for the diagnosis,
CC

CC monitoring and treatment of breast cancer. hSBP1 and hSBP2 are useful
CC as markers for breast cancer, i.e. measuring levels of hSBP1 and hSBP2
CC used for diagnosis or monitoring the disease, to identify subjects
CC at risk and to discriminate between different forms of cancer for
CC selection of appropriate therapies. They may also be used for drug
CC screening. Nucleic acids encoding hSBP1 and hSBP2 can be used in gene
CC therapy vectors to over express the steroid-binding proteins, preventing
CC binding of steroids, or antisense sequences, ribozymes. Their nucleic
CC acids can also be used for the diagnosis and monitoring (by quantifying
CC expression of hSBP), as source of probes for hybridisation and
CC amplification of genomic or related sequences for studying regulation of
CC gene function and for mapping the genomic sequence. Antibodies are used
CC as diagnostic reagents in standard immunoassays for hSBP.
CC
XX

Sequence 93 AA:
SQ
Query Match 100.0%; Score 475; DB 19; Length 93;
Best Local Similarity 100.0%; Pred. No. 2.9e-47;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MKLMLVLMALALSOHCYAGSGCPLENNVISTKINPOVSKTEYKELLOEFIDNATNAID 60
DB 1 MKLMLVLMALALSOHCYAGSGCPLENNVISTKINPOVSKTEYKELLOEFIDNATNAID 60
OY 61 ELKECFNLQNDTELSTNVEFMQLIYDSSCLDLF 93
DB 61 ELKECFNLQNDTELSTNVEFMQLIYDSSCLDLF 93

Run 1 (Seq ID #6)

RESULT 2
ID AAM59776
AAM59776 standard; Protein: 90 AA.
AC AAM59776;
DF 12-OCT-1998 (first entry)
DE Amino acid sequence of the human steroid binding protein C1.
KW Human steroid-binding protein C1; hSBP1, hSBP2; breast cancer; probe;
KW gene therapy vector; ribozyme; probe; hybridisation; amplification;
KW antibody; immunoassay.
OS Homo sapiens.
PN W0982131-A1.
PD 22-MAY-1998.
PF 07-NOV-1997; 97WO-US20674.
PR 12-NOV-1996; 96US-0747547.
PA (INCY-) INCYTE PHARM INC.
PI Akerblom IE, Goli SK, Hawkins PR, Hillman JL, Murry LE;
DR WPI: 1998-297935/26.
DR N-PSDB; AAV41579.
XX
PT New human steroid binding proteins C1 and C2 - useful for, e.g.
PT diagnosis, monitoring and treating breast cancer, and for drug
PT screening
PS Claim 1; Fig 1; 70pp; English.
XX
CC This is the amino acid sequence of the human steroid-binding protein
CC C1 (hSBP1) used in the method of the invention for the diagnosis,
CC monitoring and treatment of breast cancer. hSBP1 and hSBP2 are useful
CC as markers for breast cancer, i.e. measuring levels of hSBP1 and hSBP2
CC used for diagnosis or monitoring the disease, to identify subjects
CC at risk and to discriminate between different forms of cancer for
CC selection of appropriate therapies. They may also be used for drug
CC screening. Nucleic acids encoding hSBP1 and hSBP2 can be used in gene
CC therapy vectors to overexpress the steroid-binding proteins, preventing
CC binding of steroids, or antisense sequences, ribozymes. Their nucleic
CC acids can also be used for the diagnosis and monitoring (by quantifying
CC expression of hSBP), as source of probes for hybridisation and
CC amplification of genomic or related sequences for studying regulation of
CC gene function and for mapping the genomic sequence. Antibodies are used
CC as diagnostic reagents in standard immunoassays for hSBP.
XX
SQ Sequence 90 AA:
Query Match 100.0%; Score 450; DB 19; Length 90;
Best Local Similarity 100.0%; Pred. No. 9.2e-51;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 MKLSVCLLVLTALCCYQANAEPCPALVSELDFEFITSEPLFKSLAKFQAPPAVAKL 60
DB 1 MKLSVCLLVLTALCCYQANAEPCPALVSELDFEFITSEPLFKSLAKFQAPPAVAKL 60
OY 61 GVKRCTDMSLQKRSLLAEVLVKILKKSV 90
DB 61 GVKRCTDMSLQKRSLLAEVLVKILKKSV 90